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The Western Crop Failure and the South's Great Grain Production.

In the light of the official report of the United States Agricultural Department, just issued, it is now possible to comprehend the magnitude of the loss of Nebraska, Kansas, Iowa and South Dakota in the failure of their corn crop last year. Nebraska's corn crop for 1893 was 157,200,000 bushels, which was a little less than the average crop for three years, but in 1894 the total yield of the whole State was only 13,855,000 bushels, or less than 9 per cent. of an average crop, showing a decrease of 91 per cent. South Dakota's crop dropped from 20,511,000 bushels in 1893 to 1,490,000 bushels in 1894, or a decline of 93 per cent. In Iowa, the great corn State of the Union, which annually produces from 250,000,000 to 350,000,000 bushels, the yield in 1894 was only 81,340,000 bushels. Kansas, from a crop of 139,400,000 bushels in 1893, dropped to 41,700,000 bushels in 1894.

Comparing the yield in these four States for 1894 and 1893, we have:

	1894. Bushels.	1893. Bushels.
Nebraska	13,855,000	157,278,000
South Dakota	1,490,000	20,511,000
Kansas	41,797,000	139,456,000
Iowa	81,340,000	251,832,000
Total	138,482,000	569,077,000

Total for four States, 1893..... 569,077,000
Total for four States, 1894..... 138,482,000

Decrease in 1894

Estimated at forty-five cents a bushel, the average value of this year's crop for the country, this decline in production shows a loss to these States of nearly \$200,000,000.

The force of the loss in Nebraska and South Dakota may be appreciated by a supposition of what it would mean to the South should its main staple—cotton—though corn is even more to Nebraska than cotton is to the South—be cut short, and a 9,000,000-bale crop be reduced to 9 per cent., or, say, 800,000 bales, with no material increase in price. Such a disaster as this to the South can

hardly be conceived of, for we cannot imagine any weather conditions that would prove so destructive from Virginia to Texas; but what this would mean to the South is what the destruction of its corn crop means to Nebraska. The same drought and hot winds that destroyed its corn crop also destroyed its hay and vegetables. The total value of its two main crops, corn and wheat, was \$11,180,000, while South Carolina, for instance, with about the same population as Nebraska, raised \$12,173,000 worth of corn, though corn has been regarded as something of a side issue with the farmers of that State. Georgia produced 35,100,000 bushels of corn, valued at \$20,380,000, against \$11,180,000 for the combined wheat and corn crop of Nebraska; and Alabama raised 34,700,000 bushels of corn, worth \$18,400,000. In striking contrast with this sad showing for the Northwest is the condition of the South.

From the official report of the United States Agricultural Department, from which these figures are taken, the MANUFACTURERS' RECORD has compiled the following tables, showing the total value and production of grain in the South in 1894:

States.	Corn. Bushels.	Wheat. Bushels.	Oats. Bushels.
Maryland.....	14,268,234	7,313,201	2,015,923
Virginia.....	32,195,858	6,995,249	5,400,504
North Carolina.....	32,959,484	3,475,735	5,754,034
South Carolina.....	18,728,819	807,845	4,077,696
Georgia.....	35,143,735	1,627,413	7,527,276
Florida.....	5,214,044	643,926
Alabama.....	34,760,311	417,274	4,910,347
Mississippi.....	34,760,311	40,670	1,849,094
Louisiana.....	17,886,183	785,272
Texas.....	69,338,676	6,893,150	20,013,119
Arkansas.....	38,437,824	1,416,254	5,990,697
Tennessee.....	68,066,316	5,897,788	6,511,133
West Virginia.....	12,611,968	4,816,478	2,884,724
Kentucky.....	67,892,297	11,005,963	10,312,806
Total.....	482,252,060	50,707,020	78,675,951

States.	Corn.	Wheat.	Oats.
Maryland.....	\$7,134,117	\$3,949,129	\$786,210
Virginia.....	15,132,053	3,917,339	1,998,186
North Carolina.....	15,490,957	2,259,228	2,531,775
South Carolina.....	12,173,732	702,825	2,161,179
Georgia.....	20,383,366	1,236,834	3,838,911
Florida.....	3,701,971	394,795
Alabama.....	18,422,995	325,474	2,504,277
Mississippi.....	17,606,244	30,503	869,074
Louisiana.....	11,085,713	369,078
Texas.....	38,829,659	3,722,301	7,805,116
Arkansas.....	18,065,777	778,940	2,396,039
Tennessee.....	26,543,523	3,007,872	2,278,897
West Virginia.....	7,188,822	2,889,887	1,125,042
Kentucky.....	29,872,611	5,502,982	3,712,610
Total.....	\$241,631,560	\$28,323,314	\$32,769,189

Total production of grain in South in 1894, bushels

Total value of grain produced in South in 1894..... \$302,724,063
The total value of the cotton crop of the crop year 1893-94 was \$294,495,000. The South's grain crop, therefore, now takes the lead as yielding a larger aggregate value than its cotton crop.

THE South is entering upon an era of enormous industrial activity. It is acquiring celebrity in many ways, and if its progress can be tempered with judgment there will be nothing to regret as time passes; but this multiplication of cotton mills has about it an air of speculation and feverishness which may well give anxiety to a conservative observer. Indications are not wanting that the South needs to learn something from the experience of the West, and begin to make haste

more slowly in certain directions.—Baltimore Herald.

The South has already learned its lesson. It had its "boom" days, and its present development is based on solid ground. The New England people are the ones that seem to be crowding the market. They seem to be determined to transfer their whole textile business to the South. Caution is always needed, but we believe that the South has fully studied the situation in the light of its own experience as well as in that of the West.

Pig-Iron Production.

On January 1 there were 182 furnaces in blast in the United States, having a weekly aggregate capacity of 168,414 tons. This was a decrease of two furnaces and of 350 tons as compared with December 1, 1894. One year ago, on January 1, 1894, only 130 furnaces were in blast, and their weekly capacity was 99,087 tons. The lowest point reached was on June 1, 1894, with eighty-eight furnaces in blast with a weekly capacity of 62,517 tons. From this point there was a gradual steady increase up to the present time, when pig-iron production for the last thirty days has been stationary. According to the Iron Age, from whose reports these statistics are compiled, we enter the new year producing iron at the rate of about 8,750,000 tons a year. At that date there were thirty-nine anthracite, 121 coke and twenty-two charcoal furnaces in blast. The weekly capacity was 22,082 tons of anthracite, 141,446 of coke and 4886 charcoal.

Comparing the stocks of pig iron on hand January 1 with previous dates, we have the following:

	Anthra- cite.	Coke.	Char- coal.	Total.
November 1.....	96,757	196,112	219,351	512,220
December 1.....	90,691	258,193	216,185	564,469
January 1.....	94,073	344,961	264,424	643,458

These statistics show an increase of 83,000 tons on January 1 compared with December 1. It should be remembered, however, that consumption during December is usually at a low point as compared with other months.

The Southward Trend.

Referring to the southward movement of New England cotton mills, Messrs. Watson & Gibson, of New York, in their financial circular say:

Yesterday it was announced that the Merrimac, the largest cotton-manufacturing company in Lowell, is to erect a plant in the South, where, owing to cheaper cotton, cheaper labor, cheaper coal and generally lower expenses, drillings and sheetings can be made at least one cent per yard cheaper than in Lowell. As this class of goods now sells at the New England mills for four and a-half cents, this saving becomes absolutely imperative as a business proposition. It determines a change in the base of operations, and one that must put in jeopardy some of the most famous cotton manufacturing towns in New England, as Salem once lost its maritime ascendancy. The South and Southern railways will be vast gainers in the end by this evolution.

Bank Clearings for 1894.

The annual report of the bank clearings of the United States, compiled by the Commercial and Financial Chronicle, of New York, shows that the South maintains the claims made that the volume of its business decreased less than that of any other section. The Financial Chronicle says: "As compared with 1893, the ratio of decline is 22 per cent. at New York, 20 per cent. for the Middle States, including New York, 9.6 per cent. for the New England section, 7.6 per cent. for the Middle Western group, 9.2 per cent. for the Pacific, 8.1 per cent. for the far Western section and 4.2 per cent. for the Southern group, the latter thus having done the best of all."

While the volume of bank clearings for 1894 for the entire country showed a decline, as compared with 1890, of \$15,000,000,000, or about 25 per cent. decrease, the bank clearings of the South for 1894 were almost identically the same as in 1890. Every comparison that it is possible to make of the business interests of the South shows that that section has stood the financial strain and business depression of the last few years better than the country at large. It is also the first part of the country to begin to show the rallying strength of business and to promise an early return of activity. For the first week in the new year, for instance, the bank clearings of the entire country show an increase of only 0.1 per cent., while the South shows an increase of 5.6 per cent.

Baltimore Investments.

Unless all signs fail there will be more money made in Baltimore in the next ten years than anywhere else in the country. As the metropolis of the South and the natural seaport of the West, Baltimore has double advantages possessed by no other seaboard city. Admirably situated, from a geographical point of view, with an equable climate and with the best markets in the world, the city is capable of supporting a large and diversified population. Nowhere else can a man maintain his family more comfortably and at less cost. Much of the contiguous territory is practically undeveloped, and requires only immigration and capital to bring out its capabilities. The rapid-transit system, the increasing number of new buildings, the recently-organized trust companies, all point to prosperity and wealth. "Go West" is giving way to "Come South," and to come South is to come, first of all, to Baltimore.—Baltimore Journal of Commerce.

As the editor of the Journal of Commerce has carefully studied business conditions and prospects from Montreal, his native place, to Texas, he is well able to judge of Baltimore's prospects.

A Criticism on the South.

A subscriber to the MANUFACTURERS' RECORD, writing from Alabama, says:

There is one great trouble with our people who have money. There is not self-help enough. They do not seem to want to risk anything even for their own or their section's good.

This is not wholly true, but may be in some limited parts of the South. It is a mistaken policy if it exists anywhere.

What Can Be Accomplished by Hard Work.

The MANUFACTURERS' RECORD has often referred to the vigor with which the Mobile & Ohio Railroad, under the direction of General Passenger Agent E. E. Posey, has handled the immigration question. For several years this road has been persistently working to attract the attention of Western and Northwestern people to the country tributary to its lines. For a long time it worked against great odds and under very discouraging conditions. The local people were indifferent to immigration, and many of them were even opposed to it; the Northwestern and Western people knew little about that section, and cared less. Undismayed, however, by these conditions, Mr. Posey kept up his work, and within the last twelve months is beginning to see the fruit of his labors. In an interview with a correspondent of the Times-Democrat, referring to the immigration boom, which he thinks is now in its incipency, and which another twelve months is expected to bring to a full realization in the most satisfactory results, he says:

During the month of October we hauled thirty-two carloads of immigrants' movables to points on our line in Alabama and Mississippi, and during November thirty-seven carloads. There have been still more this month, but the exact number I have not yet received. We had 425 landseekers on our line during December, and a large number of them have made investments. A number of large tracts of land have been purchased for the purpose of forming colonies of Northern people. At Lumberton, Ala., fifty-five miles north of Mobile, a company of men from Illinois and Iowa have purchased 13,000 acres of land and are settling it up with Northern people. They do not intend to sell any property to negroes, but to have a colony composed entirely of whites. A large number of families have already invested and are either located there or are preparing to move in the near future. Another Northern colony is being established at Deer Park, Ala., and quite a number of settlers are moving to that point. The country around Citronelle is being settled up rapidly with Northern people, while a large number of new settlers have located at Waynesboro, Enterprise and other points in the pine belt between Meridian and Mobile. A great many Northern people, and especially those from the prairie region of Iowa and Illinois, have been attracted to the prairie section of Eastern Mississippi, and the whole region from Corinth to Meridian is being very rapidly settled up. Purchases are being made in that section every day. This great influx of Northern people will soon settle the race question in the South forever.

What has been done by the Mobile & Ohio road can be done by every other road in the South occupying a good territory if it will display the same energy, activity and ability. In fact, the pioneering work has been done. Thousands of people in the West are ready to move South. Some years ago they had to be educated. Now it is merely a question of their selecting a location in the South and getting ready to move. Never before had the railroads of the South such an opportunity to bring population southward. Are they equal to the occasion?

The Nashville Centennial Exposition.

The Nashville Centennial Exposition has applied to Congress for an appropriation of \$200,000 for a government exhibit. The MANUFACTURERS' RECORD believes that Congress should make this appropriation. It has aided similar expositions in this way, and has given the stamp of its approval by just such an appropriation as this to the Atlanta Exposition. Nashville proposes to follow up the work of Atlanta by a very important exposition, which promises to be of great value to the South. In view

of the interest that is now being awakened throughout the country in the South, and which the Atlanta Exposition will greatly increase, the Nashville Exposition of 1896 will be a very timely and appropriate one. The development of the South is not simply a matter of interest to this section. It is essential to the broadest prosperity and progress of the entire country, and any aid given by Congress in this direction helps not the South only, but the whole country.

The Influence of Governors in State Development.

West Virginia has been peculiarly fortunate for some years in having governors free from every taint of populist tendencies, and with broad-minded business conception, devoted to the material advancement of their State. When Governor Fleming was in office, several years ago, it was thought that it would be difficult to find a successor who, with the same steady persistency, would give his time to the advancement of every material interest. To his work very much of the advancement of West Virginia at that time was due. Fortunately for the State, his successor, Governor MacCorkle, has with the same zeal and energy given his attention to the business interests of the State. Day in and day out he has been persistently seeking to make known to the world the riches of West Virginia's resources. He has ever been ready to present the attractions of his State through the papers, through public speeches and in all other ways that have offered opportunities of telling about West Virginia. The MANUFACTURERS' RECORD has often called upon the governors of the Southern States for information about the progress and resources of their Commonwealths, and has offered the use of its columns for their presentation to the world of what their States have. The two States whose governors have never failed to promptly answer every inquiry and to avail themselves of every opportunity of this character have been West Virginia and Arkansas. So little do the governors of some of the Southern States seem to appreciate the importance of their position as to its influence in attracting attention to their State, that some of them rarely take the trouble to even answer a letter or telegram if it relates to business matters.

It is to the energy and activity of West Virginia's governors that much of its progress is due, and it is because of this that Governor MacCorkle, in his message to the legislature last week, was able to say:

I believe the condition of the State to be unexampled in her history. Her finances are in the best condition; her growth in material prosperity is almost without a precedent; her institutions have been managed with an eye single to the good of the State. New coals, great in variety, splendid in quality, limitless in quantity and unexcelled in advantage of location, are daily being discovered. New minerals and new oilfields are daily astounding the world with the vast possibilities of wealth within our borders. In nearly all reports the coal area of the State has been placed at 16,000 square miles. New discoveries of coal and new investigations place the amount at not less than 17,000 square miles. New methods are obtaining and old ideas are being revolutionized. Business interests, which a few years ago were unknown in our State, are now the most abounding in prospective wealth. Places which a short time since were silent wildernesses are today as wealth-producing as any in the Union. Our lands are rapidly increasing in value, our products are finding new and permanent markets, and the world is rapidly appreciating our growing commercial power.

The Mills to the Cotton.

The past week has been one of unusual interest in the cotton-mill circles of America. It has suddenly become a subject of national discussion. There is scarcely a paper in the land that has not within the last ten days been forced to give attention to the predominant feature of this business at present. The southward movement of cotton factories, emphasized by the contracts recently let for the building of a \$500,000 mill in Alabama by the Dwight Manufacturing Co., of Massachusetts, has been pressed upon public notice by the arrangements that are being made on the part of half a dozen or more other leading New England concerns to build in the South. When the MANUFACTURERS' RECORD, six months or more ago, reported that the Dwight Company, the Massachusetts Cotton Mills, of Lowell; the Boott Manufacturing Co., of the same place, and probably the Otis Company, of Ware, would all build mills in the South within a short time, its statements were not generally accepted, and even some of these companies sought to deny the correctness of this publication. The facts, however, had been carefully gathered, and we knew whereof we spoke.

During the week there has been considerable excitement throughout New England by reason of the request made to the legislatures of Massachusetts and New Hampshire by several companies for the privilege of increasing their capital stock in order to build mills in the South. The Merrimack Company, of Lowell, has asked for the privilege of increasing its capital stock from \$2,500,000 to \$3,500,000; the Boott Manufacturing Co. has asked for the privilege of increasing its capital \$600,000; the Nashua Company, of Nashua, N. H., \$700,000; the Jackson Company, of Nashua, \$1,000,000. All of these concerns, in addition to those previously reported, are getting ready for the inevitable by preparing to build mills South.

Diversified Manufacturing.

Out of forty-five woolen mills and sixty-nine knitting mills built in 1894, probably not a dozen of these were built in the South. There is danger that we may pay too much attention to one class of manufacturing industries to the neglect of others which we might introduce into our section and develop just as easily. It is not well to confine our enterprise to building cotton factories and allow the North to monopolize all other kinds. We can knit cotton goods as easily and as profitably as we can spin and weave them. A knitting mill costs far less than a cloth mill, and is a good enterprise for small communities which cannot build big factories. There must be money in the knitting concerns when sixty-nine new ones were built last year. It is time for us to be making an effort to capture this industry also.—Charleston News and Courier.

This is the doctrine which the MANUFACTURERS' RECORD has been preaching to the South for several years, and we are glad to note that the daily press is realizing its importance. Diversified manufacturing is as essential to Southern prosperity as diversified farming.

Improved Cotton Compressing

In its annual letter on business matters the Jerome Hill Cotton Co., of St. Louis, referring to cotton compressing, says:

We congratulate the South upon the approaching revolution in the handling of cotton, which should be worth untold millions to the younger generation of cotton producers. The old process is undoubtedly on the eve of being abandoned. The Bessonette press, a new invention, will place every station, town and plantation on an equality

as to shipping advantages. It should save at least one-third in freight, two-thirds in costs for fire insurance, one-half the labor upon the farm, and make each and every shipper absolute dictator as to where and how his cotton shall be disposed of. We have taken pains to investigate this, and can assure our patrons that it is not a theory, but a pleasing reality, and one that will be greatly beneficial to themselves, that awaits their investigation.

Dry-Docks in the South.

The government dry-dock now being built at Port Royal is nearing completion. As previously stated in the MANUFACTURERS' RECORD, this is the largest dry-dock in the United States, and is said to be the only one capable of accommodating some of the largest battleships now building. Its length is 627 feet, with a maximum breadth of seventy-six feet and a minimum breadth of forty-four feet. A site has been purchased at Algiers, opposite New Orleans, for the construction of another large dock, which is estimated will cost \$1,250,000. With the great dock at the Newport News ship-yard, the government docks at Norfolk, Port Royal and Algiers, the South will be well supplied with docks of this magnitude capable of accommodating the largest ships built. It is quite generally thought that the advantages of Port Royal for docking and repair purposes will eventually necessitate the building of a government ship-yard adjacent to the dry-dock there.

The United States Geological Survey.

In a criticism upon the United States Geological Survey, the Engineering and Mining Journal, of New York, says:

It is, indeed, now one of the most objectionable practices in the survey that it allows its members, who are receiving from the government salaries for their full services, to continue their private practice and use their official positions to make professional fees.

In reply to this Mr. Chas. D. Walcott, director of the survey, writes to the Journal and enters an absolute denial of any work of this character having been done for private practice and pay by regular members of the survey. The Journal, however, hardly treats the denial fairly, as it fails to give any facts in regard to the matter, and simply adds a line saying: "We have no doubt that the practice will now be discontinued." The MANUFACTURERS' RECORD believes that in making such a charge as this the Journal ought to either withdraw it absolutely or else present proof of its charges. In the general criticism of the Journal against the survey and the work it is doing the MANUFACTURERS' RECORD is not especially concerned, except that we should regret very much to see its work curtailed in any way. We believe that the work of the Geological Survey has been productive of much good; that the statistics which it gathers must necessarily carry more weight because of their official character than could the same information gathered by anyone else, and heartily commending, as we do, the able annual report of the Engineering and Mining Journal, we believe that the government can well afford to maintain as part of the survey a bureau for the purpose of publishing an annual report of the mineral statistics of the country. We should, in fact, be glad to see the survey more liberally treated by the government than it is, and believe that the mineral interests of the country would be benefited thereby.

THE SOUTH TO THE WEST.

As shown elsewhere in this issue, the total corn crop of Nebraska in 1894 was only 13,000,000 bushels, against 157,000,000 bushels in 1893. In South Dakota the crop dropped from 20,500,000 in 1893 to less than 1,500,000 in 1894. The aggregate loss on the corn crop of Nebraska, South Dakota, Kansas and Iowa in 1894 as compared with 1893 was over 430,000,000 bushels. The same drouth and hot winds that worked such disaster to the corn crop also destroyed vegetables and grass. In view of these facts we are able to form some conception of the condition of many farmers in those States. These reports, just issued by the United States Agricultural Department, more than confirm all that has been said as to the destitution that prevails in much of Nebraska and Kansas and as to the urgent need for help. Since the MANUFACTURERS' RECORD, three weeks ago, suggested that the South should of its bounteous crops extend a helping hand to those in want, the movement then inaugurated has assumed proportions of national interest. Contributions have been poured into the central points at which they are being gathered, and on Tuesday last, under the direction of ex-Governor Northen, a full train of twenty-two cars loaded with flour, corn, provisions, potatoes and other things, started from Atlanta for its journey to relieve the suffering in Nebraska. Louisiana will do equally as well. Up to last Saturday eleven full cars of rice, sugar, molasses and other State products had been gathered, and four or five more are to be added in order to complete a full train. West Virginia has sent one full trainload of coal and is now arranging to ship another. From Helena, Ark., three carloads have gone, and these will probably be followed by a trainload from the State at large.

In inaugurating the movement for the relief of Nebraska sufferers by the people of the South, it was necessary at the very start to secure the active co-operation of trade organizations in leading places in the South, or of a few men who could handle it. In Atlanta, ex-Governor Northen was asked to head the movement in Georgia; the Young Men's Business League of Charleston was asked to take up the work for South Carolina; the Raleigh Chamber of Commerce for North Carolina; the Young Men's Business League of New Orleans for Louisiana, and Governor Fishback for Arkansas. By active work and the prompt co-operation of Southern railways, sufficient contributions were secured in Georgia to start a full train of twenty-two cars from that place last Tuesday.

Mr. Harry Allen, secretary of the Young Men's Business League of New Orleans, in a letter to the editor of the MANUFACTURERS' RECORD, under date of January 7, replying to the request that the Business League take charge of the movement there, said:

"As our association is chiefly for local purposes, I thought best to make it a State matter. With this in view I enclosed your letter to Governor Foster and wrote him on the subject. As a result of that correspondence the governor came to the city and held a conference with several prominent gentlemen, after which he addressed a letter to the people of Louisiana, a copy of which I enclose. I have no doubt that we will be able to ship from this State a trainload of sugar, rice, molasses and other produce. I desire to commend your enterprise in originating this movement throughout the South, and trust that the liberal response to the call for aid will show that your judgment was thoroughly correct."

In response to Governor Foster's appeal Louisiana took hold of the matter with vigor, and that State will send out a full trainload, which, in aggregate value, will probably surpass the contribution of any

other State, as the contributions are mainly of rice, sugar and molasses, and will doubtless foot up \$15,000 or more in value.

As recently stated, Governor Fishback has written promising to ask of the State legislature an appropriation sufficient to purchase an entire trainload, and advices from Arkansas indicate that this will be done.

West Virginia contributed a full trainload of coal, as stated last week, and is now making up another.

The Young Men's Business League of Charleston has completed all of the arrangements necessary for receiving contributions, and has issued a circular letter to the people of the South. The News and Courier publishes this with some additional comments showing the spirit in which contributions are asked. The following extract from the News and Courier covers the work in that State:

Nebraska's Pressing Need.

"The committee appointed by the Young Men's Business League will go to work at once getting up the contributions of corn and bacon that it has been determined to make towards the relief of the Nebraska famine sufferers. Yesterday the committee drew up the following call to the people of the State:

"Fellow-Citizens of South Carolina—In consequence of the complete failure of the provision crops of Nebraska hundreds of families are suffering the pangs of starvation. Additional horror is given to their forlorn and unfortunate condition by the fact that the unfortunates are exposed to the severities of a winter unusually arduous even for that section.

"These destitute farmers have appealed to their fellow-citizens of the Southern States for aid. Neighboring States have heard their cry of distress, and their citizens are opening their hearts to them in this hour of terrible need.

"The Young Men's Business League of Charleston has undertaken to collect and forward any supplies that the charitable people of South Carolina can spare for this deserving purpose. The contributions which are asked are corn, meal, meat, clothing and money. The farmers of this State have been especially blessed by Providence with a superabundance of corn, and it is believed that they will be glad of an opportunity to contribute to the relief of their fellow-farmers of Nebraska. The railroads have generously consented to forward any supplies for this purpose to the headquarters of the league in this city, from which point they will be forwarded in bulk to their final destination. He who gives quickly gives well. The need of the sufferers is urgent."

"It will be remembered that the movement was started by Mr. R. H. Edmonds, editor of the MANUFACTURERS' RECORD. He suggested some weeks ago that out of the abundance of corn and meat that had been produced in the South this year donations should be made for the relief of the Nebraska sufferers. The suggestion met with general approbation, and more than one organization and district responded. At the request of Mr. Edmonds, ex-Governor Northen, of Georgia, took the leadership of the movement in the central part of the South, and all the contributions from that district are being collected at Atlanta, from which place it was hoped to start a solid trainload of provisions for Nebraska today. In a recent letter Governor Northen said that he had about ten carloads in sight, and hoped to largely swell that number before the train started West. Among the contributions was a carload of rice and corn from the Atlantic Coast Line system.

"A short time ago a letter from the MANUFACTURERS' RECORD was received by the Young Men's Business League of Charle-

ton asking its co-operation in the work. A special meeting of the league was called at once, and the following report was unanimously adopted:

"Your committee, to whom was referred the letter of Mr. R. H. Edmonds, editor and general manager of the MANUFACTURERS' RECORD, of Baltimore, calling the attention of this league to the suggestion that the South should inaugurate a movement throughout their section toward relieving the actual starvation existing in some parts of the State of Nebraska, and asking the co-operation of this organization in carrying out this suggestion, beg to report that they not only think it feasible that we can accomplish much in securing donations in the shape of corn from all parts of this State on account of the unusually large crop of this article throughout the entire State, but they also think it the duty of this league to take up this matter, and as far as they can relieve pressing wants of these fellow-countrymen in distress.

"Charleston has been nobly dealt with in a recent calamity, and is under heavy obligations to the outside world for their assistance and support when we needed it, and should do her share in similar instances of distress when invited to do so. The privilege of initiating this movement in this State should be taken up by our league at once."

"It seems that the people of South Carolina, and of Charleston particularly, owe these very people who are starving in Nebraska a debt of gratitude other than that which the sufferings of every deserving man imposes upon his neighbor. When Charleston was devastated by the earthquake nine years ago these very people were among the first to extend to her a helping hand.

"Mr. George Lunz, of this city, said yesterday that he was in Valentine, Neb., at the time of the earthquake. It is a small town and the people have always been poor, but when they heard of the calamity which had fallen upon this city they promptly started a subscription and raised a considerable sum of money to be sent to the relief of the Charleston sufferers. Valentine is now one of the places in which the people are starving. The committee feel that when these circumstances are known no other argument need be advanced to urge a liberal response to their call for aid."

The MANUFACTURERS' RECORD regrets that it cannot give space to the many letters from Nebraska telling of the suffering in that State and asking for help. These have all been referred to the proper parties. In order to show how the movement is regarded it may be well, however, to publish the following from Rev. Luther P. Ludden, general manager of the Nebraska State relief commission, Lincoln, who, under date of January 9, wrote to the editor of the MANUFACTURERS' RECORD:

"We have 30,000 people in our State who are living today on the charities of the generously-hearted people of the United States. We regret their condition; it is not a fault of theirs. They are in what is mainly known as the frontier counties of our State. While the entire State has suffered from the drouth, with possibly a few exceptions, the older settled parts of the State have credit and are able to help themselves. The needy that we are supplying with provisions and clothing have spent their all in trying to establish a home on the prairies, and two successive crop failures, or a partial failure last year and a total failure this year, having no credit, they are simply left at the mercy of such donations as may be sent for their relief. We fully appreciate the spirit which prompts you in taking hold of this movement and striving to help us to relieve the suffering on the borders of Nebraska. When the great cry came from Russia I believe Nebraska was the first to forward a

trainload of supplies. In less than ten days we had three trainloads on the way to the mills to be put into what we considered the best product—meal—for the suffering Russians, and if there is any people in the land who will appreciate this effort of the South it is the people of Nebraska, as they see coming back to them that which they so kindly gave two years ago. On behalf of the thousands of drouth sufferers we desire to thank you, and through you the good people who are laboring to make this donation so marked a success."

The Christian Herald, Rev. Dr. Talmage, editor, has made an investigation through many ministers in Nebraska, and in a letter to the MANUFACTURERS' RECORD says:

"Letters received by the Christian Herald from fully 200 points in Nebraska and Kansas show that a large portion of the population of the entire western line of counties in both States are afflicted. Continued drouth, especially in Western Nebraska, has reduced the condition of the farmers to one of abject poverty, and we are sure that many hundreds of families, indeed, probably thousands, are at this time on the verge of starvation. They are largely destitute of food and clothing, and have no means whatever of preparing for next spring's crops."

John D. Wier, of North Platte, Neb., writes:

"I hear of many cases of suffering in our county, as well as in all the other counties of Western Nebraska. Hundreds of families in this section are about on the verge of starvation, and if help does not come very soon, I do not know what the people will do. Our people need food most, and would be very thankful for anything that the South can send. It is estimated that there are 30,000 needy people in Western Nebraska. Our people are doing all they can, but cannot meet the demands made upon them. We thank the generous South for all they send us in this time of need. The picture of suffering in our section is a dark one, but it is not overdrawn."

A Cry for Help.

LITCHFIELD, NEB., January 11.

This portion of Nebraska is in destitute circumstances. It is impossible for one-tenth of the farmers to stay in this country unless help is had. The drouth region is nearly all that portion of State lying west of centre of State. A great cry of destitution has gone forth from some localities, more especially Boyd county. The conditions existing in Custer, Sherman and Buffalo counties are the same as that of Boyd or any drouth-stricken county. All have lost two years' crops, and when it is understood that homesteaders are a class that has but little money, in many cases just barely enough to file necessary papers, it is clear to all minds that two successive crop failures is more than we can fight alone. If the people of the South and East could have access to the local papers of the drouth regions they would appreciate our needs. The county papers give the facts and record many tales of suffering. The World-Herald is the only State paper that has done anything for us. The rest are afraid of lowering the values of securities, and that, too, at the expense of cries from hungry children. The State of Nebraska is not able to care for all her poor. The chairman of our committee is also chairman county board of supervisors, and our society is recognized by State commission.

C. D. LITTLEFIELD,

Secretary Litchfield Aid Society.

Help Needed to Keep from Starving.

REPUBLICAN CITY, NEB., January 11.

I write to you in regard to Nebraska drouth sufferers, as there are families after families who have not enough to eat or clothes to wear, and not any way of helping themselves. There was not anything raised in this locality. Could there be aid

sent in to keep the people from starving and to get them some clothes, anything will be acceptable and joyfully received. May God help you in all your efforts for our people.

ALBERT WILLIAMS.

How the Movement Is Regarded.

CORNWALL ON HUDSON,
ORANGE COUNTY, N. Y., January 7.

I wish to thank you for your noble and Christianlike suggestion that the South, from its abundance, send a train of provisions to our suffering fellow-countrymen in the West. It would not only illustrate once more the spirit of Christianity in the foremost nation of the world, but would reveal anew the real spirit of brotherhood and sympathy which really and truly exists between all parts of our widely extended country, which bind them together more strongly than bands of steel, and which was so beautifully shown in the assistance sent from the North to the afflicted city of Charleston.

It would be fitting, indeed, that such a noble movement should have its origin in the city of Baltimore, the chief commercial city of the South. The reports received from the famine-stricken cannot be exaggerated. I have personally traveled through a part of the country, especially in Southwestern Nebraska, where perhaps the destitution is as great as at any point, and am satisfied that all the truth has not been told. For hundreds of miles there is no fuel except what may be brought in on the railroads from distant mines. The pioneers are hardy, industrious and uncomplaining, but their crop is their all. With it they must buy their fuel, clothing, groceries and medicines and whatever they need. But for two years this has failed and they have nothing left. No one who has not traveled through that section can realize the vast extent of territory afflicted. It extends from Dakota, through Western Nebraska, Kansas and Indian Territory a thousand miles.

DANIEL E. POPE.

What the New York Sun Says.

We commend the conduct of those of the Southern States which are about to send supplies of rice, corn, bacon and coal to the needy farmers of Nebraska. Loads of provisions will be forwarded this week from Augusta and Baltimore and will be transported free by the railroads. Nearly all of the Southern States have made offers, which will be welcomed in Nebraska.

A fortnight ago we copied from the Omaha Bee a statement that exaggerated reports of the destitution in Nebraska had been published, and that Nebraska was abundantly able to relieve all the suffering that existed there. We have learned since then that this relief has not been given. The letter which we printed from a well-informed correspondent, the Rev. George R. G. Fisher, contained deplorable facts from Nebraska. It is on account of these facts that our Southern brethren have come forward with help; their generosity will be appreciated. We are happy to say that there has been but little suffering from lack of the necessities of life in any Southern State during the long period of hard times.

The States of the South have for years striven to attract immigration to their fertile fields and unoccupied lands. We believe that their service in helping Nebraska will be more effectual in attracting to themselves immigrants of the desirable kind than all the conventions for the encouragement of immigration that have been held in recent years. Gifts of provisions by those who have abundance are more potent arguments than all the speeches that can be made. Already we have advice that a good many of the cultivators of the oft-blighted regions of Kansas, Nebraska and Iowa are moving southeastward, and there need not be any doubt that this movement will be greatly enlarged when it becomes known that the South has food to spare, besides millions of acres of arable land that can be procured on easy terms.

[For carloads from Augusta and Baltimore the Sun should have said trainloads from Atlanta, New Orleans and elsewhere.]

SHALL THE SOUTH BUILD SMALL COTTON MILLS.

An Interesting Discussion of Governor Stone's Proposition.

At the Cotton Growers' Convention, held in Jackson, Miss., last week, Governor Stone advocated the building of small cotton mills throughout the South. In his speech he said:

"I do not advocate the erection of large central factories, involving the investment of large sums of money, within the reach only of capitalists and men of means, but rather the establishment of small mills at convenient locations for utilizing the cotton grown in that vicinity, numerous enough to spin all the yarn, and so convenient and close as to be able to handle even the seed cotton and gin it in the factory as it is spun."

If this plan were feasible, it would be very good for the South, but in this day of concentration and of the centralization of manufacturing enterprises it is very doubtful whether it would be wise for the South to undertake the building of such small mills.

As the suggestion made by Governor Stone has been commended by several leading papers, the MANUFACTURERS' RECORD deemed it important to obtain the views of a number of leading people who have carefully studied the cotton-mill question. All whose replies have so far been received take very strong ground against the wisdom of such a policy. A careful banker in Greenville, S. C., who has been closely identified with cotton-manufacturing, holds that it would be unwise to build any cotton mills in the South with a capitalization of less than \$50,000. Other writers take a similar position. In this connection one letter claims that the Piedmont belt of the South, which extends from Virginia to North Alabama, is the natural situs of cotton-manufacturing; that the price of cotton is more likely to decline than to advance, and that the South must be prepared to meet this low price by the production of its own foodstuffs. As the writer of this letter, Col. John L. Black, is an old-time Southern cotton-planter, a West Point graduate and at the present time interested both in planting and in industrial interests, his views are worthy of thoughtful consideration. On the other side, Mr. Inman, of Atlanta, one of the largest cotton-handlers in the world, takes the ground that the South must decrease its cotton acreage and thus advance the price, claiming that there is no danger of other countries seriously interfering with our supremacy in the world's cotton trade. To these various letters the MANUFACTURERS' RECORD asks the attention of its readers. We shall be glad to continue the discussion, and invite correspondence from anyone, North or South, who has anything of interest to say on this subject.

Views of a Practical Business Man, an ex-Cotton Planter Himself.

BLACKSBURG, S. C., January 12.

The ideas of Governor Stone, advanced at the Cotton Growers' Association at Jackson, Miss., are in the main fallacious.

1. Every cotton mill erected must bear the burden of fixed charges, which must be forever taxed on its output capacity—a tax on each spindle. While small men managing such small factories may work for low salaries, even these low salaries, taxed on 2000 or 3000 spindles, will be a heavier fixed charge and a greater tax per spindle than the services of a high-priced man, and a man of greater business ability will be managing from 20,000 to 100,000 spindles.

2. Small factories on small streams of water may be taxed lightly for power, but if steam is used, 160 horse-power or less driving 4000 spindles or less will cost more per horse-power than that developed by larger engines of 500 to 1000 horse-power.

3. Theoretically Governor Stone's ideas look well, but practically he must learn the fact that only a limited portion of the cotton-producing territory is fitted for the operation of cotton-spinning, this territory or belt being the Piedmont or South Atlantic slope, which section has an abundant supply of suitable labor, both cheap and tractable; water-powers which can be developed and operated at an annual cost of \$1.50 to \$2.00 per horse-power, and cheap and speedy railroad and water transportation to Eastern or foreign markets.

In the rich alluvial valley of the Mississippi suitable operative labor for spinning is neither at hand, nor can it be supplied, unless the Canadians or other cheap foreign labor may be imported into it; the bringing in of this pauper labor would be but as fuel to the fire, when more labor now stands at hand there engaged in the production of cotton than can meet with remunerative employment.

4. In the entry into this new field of enterprise (cotton-spinning) the Southerner must well consider that he will there meet not only local competition, but the active competition of Eastern and of foreign spinners, and in this new field he will likely learn ere many years to know that the fittest will survive.

5. Small mills will be dependent on either local markets or on the manipulation of middle and commission men making excessive charges for the handling of goods, which will largely add to fixed charges, and sooner or later all small mills will meet the inevitable result—a combine under one central management, if, indeed, such a combine will save them from going to the wall. Large mills of 25,000 to 100,000 spindles or more, well located, can alone compete successfully with Eastern and foreign mills. In the long run such large mills at present can and will in the future export goods successfully to foreign markets, and it may safely be predicted that large mills at the South will speedily grow larger, and that in the end these "big fish" will tower above and gobble up the little fry, as has in such cases always happened. Factory labor is eminently "gregarious" and will flock to large manufacturing centres, and will be content there, looking down with contempt on the same kind of labor working for a small factory and making a living at some small cross-road. The housing and facilities for buying not only the prime necessities of life, but the spending of their money for the luxuries of life which factory operatives know so well how to do, are best met with at large mills, which build around them large towns or even cities.

6. That the South should multiply its cotton machinery indefinitely no Southern man can or will deny, but in doing so the greatest judgment and business tact should be displayed in the location of the same. From the statistics of the past twenty years water-power mills at the South have far outstripped steam power mills. Many of the water mills' stock is quoted over par, and in some cases above 150, 100 being par, while steam-power costs less here than in the East.

In the line of small mills the South can take and hold a monopoly in the line of knitting mills (cost \$15,000 to \$25,000), and in rope, twine and batting mills, costing even less.

7. Oil mills should be erected at every cross-road where are annually assembled 5000 to 10,000 bales cotton, and in this line the writer will agree with Governor Stone so far as his theory applies to cross-road mills. The locating of these oil

mills everywhere will return the meal and hulls to the very soil that produced them, thus ensuring increased fertility of the surrounding lands.

The oil sold off of the farms carries with it no element of fertility, as it is available and valuable as stock food, but may be kept and used as man's food.

Large and largely increased on their present size mills alone can assert and maintain that supremacy we are so rapidly gaining in the cotton-spinning world, and the most successful of these large mills will soon be found to be those driven by water-power on our never-failing streams in this healthy Piedmont belt.

Whenever the writer hears of a cotton-growers' association or meeting the idea readily occurs of buncombe or politics, and met with and heard of on such occasions and at such places are a set of mouth-ing, seedy and needy politicians, who are anxious for the welfare of those dear people who have votes. (Distinctly this remark is not applied to Governor Stone, a man unknown to the writer, but one for whom he entertains profound respect.)

In this State a few years ago a political Moses preached a crusade of warehouses at every cross-road, free silver and soft money, and his poor, deluded hearers fondly believed, from his fiat alone, cotton, then at ten cents per pound, would speedily rise. But, like other false prophets, he was in error. The warehouses were built in many places, and in most cases those who used them lost by it. Cotton has slumped to five cents and less, and Moses's howl is no longer heard. With India's crop of last year locked up at home, with Egypt's crop annually increasing, with Southeastern Russia exporting cotton, with the Argentine Republic doing the same, and small supplies of this fibre coming from other sources, and with the now almost absolute certainty of our carrying over 2,000,000 to 2,500,000 bales from the crop of 1894, we may have reasonable grounds to fear that the crop of 1895 will go on the market at three and a-half to four and a-half cents.

The cotton-producer of any intelligence must look these stubborn facts squarely in the face and govern himself accordingly.

He can use commercial fertilizers on up-lands, as they cost nothing, lengthening the season by hastening maturity, and increasing production and cost of labor 33 per cent. at least.

In conclusion, Governor Stone or anyone else to the contrary, the cotton-producer can hedge against low prices in but one way—diversify crops, making everything else that will sell at home or abroad, but most certainly producing all "hog and hominy" they and their labor can consume at home, and buying as little as possible from abroad or from off the farm.

Cotton sold in 1837 at three cents; it may yet sell for even two cents. In the making of it the "fittest" will survive, and you may depend on it we will yet, and ere long, double our present production. We either have to do this or to let the world look elsewhere for its cotton. The price is down, and down to stay. If anyone sees he can't make it at such low prices, he had best go at some other employment.

JOHN L. BLACK.

Another View as to Cheap Cotton.

In opposition to such views as expressed by Colonel Black and many others as to the question of low price of cotton, Mr. S. M. Inman, the great cotton merchant of Atlanta, in an interview in the Constitution, says:

"There is but one side to the question. To be prosperous the farmers of the South must raise less cotton than they are doing. The crop is entirely too large. The price has gone down and down, and cannot reasonably be hoped to rise any considerable degree until there is less cotton promised for the future.

"The one solution of the whole business

is a decrease in the crop. This must come right speedily for the safety of the cotton-planters of the South. It is as plain a matter as two and two make four.

"Some say we must raise cotton more cheaply. They say we cannot afford to cut down the crop, lest the foreign growers, with their alleged increases of production from year to year, would flood the markets over our heads, and thus continue to hold the same condition of affairs—a flooded market—to deprive the American grower of what he might have made by raising more cotton. In other words, their argument is that it makes no particular difference to us if we do cut down our cotton crop, so long as there are foreign producers who, with overwhelming yields, would still force the production beyond the demand.

"In my opinion, this argument is worthless, and the statistics well known to the cotton world bear me out in the contradiction of such claims. What are the facts in the case concerning the relative increases of foreign and American cotton as the seasons come and go?

"The figures easily show that foreign cotton-growers are powerless to overcrowd the cotton markets of the world. Take the figures as they are for periods of five years at a time and compare the same with the figures of the American crops for similar periods, including the past twenty years.

"Here in America during the five years from 1867 to 1872 the average annual crop was 3,167,000 bales, and for the next five years after that 4,771,000 bales.

"For these same two periods of five years the foreign crop on an average was the first five years 2,337,000 bales, the second five years 2,022,000 bales, a positive decrease.

"For the five years, inclusive, 1879-84 the average American crop per year was 6,721,000 bales, and for the five years following the average annual crop went up to 7,659,000 bales. For the same term (1879-84) the average annual foreign crop was 2,071,000 bales and for the following five years 2,269,000 bales, a slight increase.

"Put the figures in parallel columns, and the increase of the American crop for periods of five years show up how overwhelmingly the cotton crop of America has increased in comparison with foreign crops thus:

	American averages.	Foreign averages.
1867-72.....	3,167,000	2,337,000
1873-78.....	4,771,000	2,022,000
1879-84.....	6,721,000	2,071,000
1885-90.....	7,659,000	2,269,000
1891-94 (four years).....	9,484,000	2,595,000

Weight of all bales, 400 pounds.

"These figures show that in the five-year periods for some twenty-five years past the foreign crops, as a whole, have increased about 10 per cent., while the American cotton crop has increased 200 per cent., and if we include the crop now being marketed, 210 per cent. We Americans have only ourselves to blame for the low price of cotton, and if we persist in planting and raising more cotton than the world needs, selling it below cost, thus working for nothing and boarding ourselves, we ought to quarrel with nobody but ourselves.

"Yes, there is nothing to be done but to cut down the crop, and the only way to do this is to cut down the acreage of the Southern States. The farmers did right in their convention in Mississippi in urging a reduction of acreage. If they do reduce the cotton acreage they will have more time to raise their food products, and will at the same time be enabled to get bottom prices for the cotton they do raise at the end of the year. If they do not greatly reduce the acreage, the hope for the South is that the low prices will force cotton manufacturers to come South, and in this way indirectly be the cause of a development of the industrial South. But in this latter event, as you see, the farmer would not be

at once the direct man benefited. So in order to secure his own individual and immediate remedy for the ills that exist, he must, after all, look to the proposition to reduce the acreage and thus raise the price of cotton, living at home all the while with home-raised supplies and food."

Can Small Mills Connected with Gineries Be Made Profitable.

WILSONVILLE,
SHELBY COUNTY, ALA., January 8.

Knowing your sincere good-will for the South, and something of your untiring efforts for the welfare and upbuilding of her people, I write to you as an advisory friend suggesting an idea, and earnestly soliciting your counsel and careful consideration of the subject. To wit:

All over the cotton belt there are good, roomy ginhouses and ample steam power to run considerable machinery. The houses are empty and the machinery idle eight months in the year. Can there not be spindles in a limited capacity put into these ginhouses and run by their idle power to spin a part of each crop, and thereby enable us to retain in our section a little more of the money in our cotton than we now do? Cotton at five cents and yarn at fifteen cents, to spin it, increases the market value 300 per cent., or it would put into our pockets \$3.00 to \$1.00 as it is now; or, to be more easily understood, a bale of cotton that now leaves \$25.00 in our hands would leave \$75.00 with us if turned into thread.

All the labor needed is already domiciled around the ginhouses, and can be used with but little cost to the spinner and to great advantage to the operatives, as they are idle and a dead weight, save in picking cotton.

Of course, I understand that one with practical experience must superintend the work, but we can readily master the situation on that score.

The problems to solve and to which I invite your attention are: First, small outfits of improved (not worn machinery cleaned and burnished) machinery for spinning, capacity of fifty to 100 or 500 pounds of cotton per day; second, arrangements by lien or otherwise to enable ginners to purchase on living terms.

To these ends may not honest, fair-dealing manufacturers of spinning machinery be induced to put up outfits, taking a small cash advance and a lien on machinery, with their obligation to take the yarn at a contract price, thus securing themselves and aiding the purchaser? Start the ball in motion; looms will soon be added, and every neighborhood in the cotton belt will ere long be spinning and weaving cotton.

By utilizing the capital already invested in houses and steam power, we would thereby invest several millions of dollars in the manufacture of cotton that we cannot raise in any other way, and directly interest in the work thousands of people who will never subscribe a farthing to big concerns to be swallowed up by bigger fish, and by this method we can put in motion 1000 spindles to every 100 that would move by big stock companies.

Enable us to keep in the South one-half the money actually in the cotton we produce, and questions of tax on imports, tax on State banks, the demonetization of silver and five-cent cotton will not disturb us nor hold us down long.

If from these crude suggestions you can evolve something practical, and then bring the manufacturer of spinning machinery and our ginners together on equitable terms, in my humble opinion you will have solved the financial problem that now confronts the South, for which generations yet unborn will rise to call you blessed.

This question has been mooted often in the past. Nothing practical grew out of it. The time had not come, but now "the fields are white unto harvest."

To make our cotton leave more than five

cents per pound in our hands is a necessity realized by every sane producer of cotton. We cannot discontinue the production.

We will not permanently diminish the area planted to cotton, nor can we live on five cents per pound for raw cotton.

We must find new outlets or uses to increase the price of the raw material, or to some extent, manufacture it to increase the aggregate of money it leaves in our section. It is useless to approach the question from any other standpoint.

To urge a reduction of area to cotton in the United States is a bid for an increase in other countries. It would only temporarily improve the price, i. e., until other cotton-producing countries could supply the shortage, while in lieu of cotton we are urged to produce food supplies, and thereby rob the great Northwest of so much patronage.

Any proposition based upon the theory of curtailment of farm products or manufactured products in our country is impracticable, injurious, narrow, selfish and un-American.

W. T. SMITH.

\$50,000 Mill as Small as is Regarded Safe.

THE PEOPLE'S BANK,
GREENVILLE, S. C., January 12.

I am somewhat doubtful of the small cotton-mill scheme. If organized as stock companies the expenses are too great, and if run by individuals the credit of such small operators is generally so limited that they force goods on the market, which makes a price for larger mills and prevents either from making money, and usually results in bankrupting the small mill. The Stribbling plan, which, some years ago, was urged upon somewhat this same idea, was a complete failure. In my own opinion, I think nothing less than a \$50,000 mill is safe, and even that figure is rather small.

FRANK HAMMOND, President.

Against Small Mills.

CONE EXPORT & COMMISSION CO.,
NEW YORK, January 12.

We are of the opinion that if Governor Stone's advice of establishing a large number of small mills is followed, many of them will be poorly managed and unprofitable. Our experience is that the success of most mills is owing to the quality of the ability with which they are managed. Small mills cannot afford to pay for first-class ability. There are very many reasons why we would not advise capitalists to take stock in such institutions. We are quite sure investments in the average of such mills would not be remunerative.

MOSES H. CONE, President.

GAFFNEY MANUFACTURING CO.,
GAFFNEY, S. C., January 14.

I think a mill of 20,000 to 25,000 spindles about the best size, and know that a mill of this size has the advantage of mills of 3000 to 5000 spindles. As to Governor Stone's idea of building small mills and ginning the cotton in connection with the spinning plant, I do not think it can be done and compete with larger mills. I should advocate the South building mills of 20,000 to 25,000 spindles.

H. D. WHEAT, Treasurer.

NEW ENGLAND TO THE SOUTH.

The Cotton-Mill Movement Started—What It Means to Both Sections.

[Special Correspondent, MANUFACTURERS' RECORD.]
LOWELL, MASS., January 12.

The business men here do not conceal the alarm they feel at the movement of capital now invested here southward. During the past week two great corporations, the oldest in the city, have applied to the legislature for permission to increase their capital and to do business outside the State. They are going South, perhaps to South Carolina or Georgia, to build mills. The companies that applied to the legislature this week are the Boott Cotton Mills, capital at present \$1,200,000, and the Merrimack Manufacturing Co., capital to be

increased to \$3,500,000. The Massachusetts Cotton Mills, capital \$1,800,000, some months ago expressed its intention of going to Georgia to build a mill, and to that end a new company was organized so as not to interfere with its present charter.

Other big companies here and in Fall River, Manchester and Holyoke must, in self-defence, follow the lead of the three Lowell mills that are recognized as the leaders in the cotton-goods trade in the North. The Dwight Mills, of Chicopee, are already in the Southern movement. The Whittier Cotton Mills, a smaller concern of this city, will undoubtedly move a great part of its plant South, and the United States Cord Co., whose mill was destroyed by fire here last summer, will go with the Whittier people. President Paul Bulter returned a few days ago from a tour in the South looking for sites for the Whittier and Cord companies.

Now the Parkhill Mill people, of Fitchburg, owns up to a disposition to go southward.

In New Hampshire the Jackson Company and the Nashua Company have asked permission to increase their capital \$700,000 and \$1,000,000, respectively, in order to build in the South.

I had a long chat with Treasurer Clarke and Agent Cumnock, of the Boott Mills, a couple of days ago. They frankly stated that the only salvation for some of the lines of goods, whose trade-marks are valuable from being fifty years in the markets of this and other countries, is to move the manufacture of those goods to the South. It is an impossibility to make them here at a profit, while in the South they can be made at a handsome profit. "In the one item of raw cotton alone," said Mr. Clarke, "the mill in the South gets a lead of one cent a pound over the mill in the North. We have 4000 looms. Say that each loom uses 100 pounds of cotton per week, there is a saving of \$4000. In twenty-six weeks, or six months, as we estimate it, there is at least \$100,000 difference. And then we pay for coal \$4.50 a ton, while in the South they get it for \$2.00. Our taxes are one-third higher here in Lowell than they can possibly be anywhere in the South where we are likely to settle. Help is costlier up here, at least twice as much as in the South. It is a pity to sacrifice our trade-marks when they may be retained at a great profit by putting them on goods made in the South."

Agent Cumnock said: "New England has seen her best days as a manufacturing centre. Here in Lowell we have water-power, and nothing more. But the bulk of our power is steam. We must go South, as the only way to continue our old lines of goods. The great difference between the cost of coal, labor and cotton in the North and in the South turns the tide in favor of the South, at least on plain goods."

Mr. Cumnock is recognized as one of the hardest-headed millmen in this section of the country. Agent Ludlow, of the Merrimack Mills, says what Clarke and Cumnock say. Another thing that is forcing the Lowell mills into other fields is the constant legislation against corporations and the aggressions of the labor agitator. The millmen do not care to acknowledge that they are worried by these things, but the fact that the help here are under the domination of agitators who do not work, and the fact that the legislature has reduced the working-time to fifty-eight hours per week, and that one branch of the last legislature passed a 56-hour bill, is the last straw.

The aggregate capital of the concerns now tending southward is \$7,000,000. Whether any of that capital will be transferred South, or whether it will be new capital entire that will go South, remains to be seen. But in either case the money will, in the main, be put in by the same people who now own the Northern mills.

The stock in the new company organized by the Massachusetts Mills Company is all taken by the heavy stockholders in the present Massachusetts Company. The title of the new company will be "The Massachusetts Cotton Mills Company Doing Business in Georgia." It is likely that the Georgia mill will be operated from Boston and Lowell.

A gentleman who does not wish to have his name mentioned says that the flat fact that the South is now out as a square rival of the North must be accepted. To start with, the South has natural advantages which can never be ours. "Fuel in the South can be delivered for less than one-half what it costs us in Lowell. There is an advantage that overcomes all the advantages of the Merrimack river. If I could get coal in the bunkers in Lowell for \$2.00 a ton I should close my sluices and get all my power by steam, and save money by the change." That is the way all the practical millmen talk; but with freight rates eighty-five cents per ton from Boston or Salem to Lowell alone, the cheap-coal idea is out of the question for us.

And then they tell me that Lowell calico goods are marketed in the South and West and in the West India islands. A cotton mill in Georgia is not only nearer the raw materials, but it is in the heart of the market for the manufactured product. The saving in freights alone would pay a dividend. Short hauls to the Southern and West India markets are the things that look big when the Northern cotton operators do their figuring.

In business there is no sentiment, and there is no line between North and South. It is all a question of arithmetic, and as such the present question is being treated. The mill paying the smallest wages, getting its materials cheapest and working the longest hours will have the greatest attraction for capital. And a new mill in the South has more advantages over an old one in the North. Agent Cumnock explains that a new mill built now and equipped with new machinery with the latest ideas, can turn out a greater amount of goods for a given number of hands and a given amount of horse-power, and that for ten years there would be few repairs needed on machinery. The saving in repairs alone is great, as any man accustomed to handle machinery well knows.

The latest item added to the long list of arguments in favor of the cheaper production that the South guarantees to makers of cotton goods came today in the statement that print goods have dropped in the market to two and nine-sixteenths, the lowest price ever known in the history of the trade in this country. The handlers of cotton goods are aghast at this showing, and it would not be surprising if the next few days would show more big concerns embarked in the Southern movement. There is not much else left to them, except to stop making and printing cotton cloth.

The cotton manufacturers of New England are like a barrel of eels—touch one and they all squirm. They are banded together in an association for mutual advancement and protection. They have their own insurance companies, and when one is in trouble, through strikes or other causes, the others help out, with their moral support at least.

These things being known, it is more than likely that the present movement southward is the result of a general agreement to move their coarse goods manufacture to the South for a starter, and instead of coming out at the same time with their appeals to the legislature, they may appear at different times during the present session.

The business men who are alarmed at the exodus are busy now condemning the labor unions, to whose constant opposition is laid the responsibility for the losses this and other cities in the print belt are likely to suffer. But the labor unions didn't make cotton and coal cheaper in the South than in the North, and that unnecessary evil, the labor agitator who doesn't labor, is really a small factor in the case. As that calculating Scotch-American, Agent Cumnock, says: "It is the superior natural advantages that have turned the tide in favor of the South." MARTIN.

RAILROAD NEWS.

[A complete record of all new railroad building in the South will be found in the Construction Department, on page 387.]

Talk of a New Railroad.

The citizens of Harrisonburg and of Rockingham county are making an earnest effort to raise \$150,000 to revive the railway scheme that looked to the construction of a road from Elkton, on the Shenandoah Valley branch of the Norfolk & Western, westward across the valley and around the southwestern end of the Massanutten mountains, and across Oak Ridge to Harrisonburg, and thence west of south to Bridgewater, on the North river of the South Fork of the Shenandoah, with the idea that from the latter place it will pass through water and other low lands in the mountains of the Appalachian system westward across the adjacent corners of Augusta and Pendleton counties, and thence through Highland and other counties westward to the eastern border of the great Ohio river basin (or so-called Appalachian) coalfield. Considerable grading has been done along this indicated route from Elkton and well into Highland county. It will require a good deal of money to construct the road in question. The amount that Harrisonburg and Rockingham are trying to raise will be but a small portion of what it will take to build even the portion of this road from Elkton to Bridgewater; but if they can secure this connection between the Norfolk & Western and the Baltimore & Ohio by raising this money, it will be a most excellent investment for Rockingham and its enterprising county-town.

To Develop a Hardwood Section.

A fine hardwood-lumber section in the Mississippi delta is to be opened up by a new railroad to be built. The line will be constructed at once by the Dublin & Coldwater Railroad Co. J. J. Wickham is president of the company, and S. T. Rucks, R. H. Wildberger, of Clarksdale; Lamar Fontaine, E. L. Fontaine and George Richberger are also interested. Some active development is to follow the construction of the railroad, of which six miles are to be built at once. A further extension of fifteen miles is contemplated. Mr. Wickham is also manager of the Lewiston Land & Manufacturing Co., which proposes erecting a large heading and stove factory. A town has been laid out on Cassidy's bayou named Lewiston, and several buildings have been constructed. Contract for supplying the equipment for the first section has been let to the Southern Equipment Co., of Memphis, Tenn. This company writes the MANUFACTURERS' RECORD that it has made arrangements for locating two large saw mills on the line of this road, and is now negotiating for the establishment of other mills. There is said to be an unlimited supply of hardwood lumber in the territory to be penetrated by the new road. It is understood that E. L. Fontaine, secretary of the railroad company, is now in Chicago enlisting capital in the road and arranging to float its bonds.

A Virginia Project.

A dispatch from Fredericksburg, Va., announces that the plan to build a railroad through the "northern neck" of that State has reached a point where a company has been formed with ample capital to build the line. The company is called the Northern Neck Railroad & Transportation Co. William C. Haight, of Bridgeport, Conn., is president; F. L. Rodgers, of Bridgeport, secretary and treasurer; directors, W. A. Little, Jr., and M. B. Rowe, of Fredericksburg, and George B. Jones, of Richmond, Va. One hundred thousand dollars of the capital stock was subscribed by Northern capitalists, and the

2 per cent. required by law, amounting to \$2000, was paid to the treasurer.

W. C. Haight is a member of the Swords Manufacturing Co., of Bridgeport, and, with Mr. Rodgers, is reported to represent a syndicate which owns a tract of land in Lancaster county. It is announced that this syndicate is financially able to build the road, which would be about seventy miles long, extending from the Richmond, Fredericksburg & Potomac road at Fredericksburg through Westmoreland and Lancaster counties to tidewater on Chesapeake bay. The "northern neck," as it is termed, lies between the Potomac and Rappahannock rivers, and has no railroad facilities whatever. The Weems Line of steamers from Baltimore is the main transportation route for the people who live near the Rappahannock. Several harbors deep enough to float a large steamship are found at the mouths of creeks flowing into the Chesapeake bay from Lancaster county, and the road will terminate at one of these points.

George B. Jones, of Richmond, Va., one of the directors of the company, writes to the MANUFACTURERS' RECORD as follows: "The length of the road from Fredericksburg to Millenbeck, the eastern terminus, is about ninety miles. There will be one steel bridge over the Rappahannock river at Fredericksburg about 750 feet long, and, perhaps, several short-plate girder bridges between Fredericksburg and Millenbeck. The road will be standard-gage of the very best construction, using 76-pound steel rails, white oak and heart-cypress ties. All structures will be made permanent, and masonry will be built for double track. The services of William A. Hankins, civil engineer, Richmond, Va., have been engaged, and it is the intention of the company to complete this road before the coming fall."

A 70-Mile Louisiana Line.

Railroad building in Louisiana has been noticeable recently for its activity. One of its latest projects is for a 70-mile line through the southern part of the State, which is being promoted by a number of prominent business men. This is the Central Louisiana Railway. Hampden Story, of Rayne, La., its president, gives the MANUFACTURERS' RECORD the following outline of the company's plans:

"The principal business men of Rayne and of the parish of Acadia have organized the company with a capital of \$250,000, with 5000 shares at a par value of \$50.00. The contemplated route or line of the road will run from some point on the Bay of Vermillion with deep-water facilities to Abbeville, a town of 3000 population; thence through the centre of Vermillion parish to Rayne, crossing the Louisiana Western Railway; thence to Church Point, sixteen miles therefrom; thence to Chicot, in the parish of St. Landry, and thence to some point at or near Cheyenneville to connect with the Texas & Pacific Railway. The right of way will be given or donated to the company. We expect to put a corps of engineers in the field by the middle of the month to trace and survey the line, after which maps and profiles and estimated costs of construction thereon will be submitted.

"It is our purpose as soon as the road is surveyed, rights of way, land grants and terminal facilities are properly secured, to enlist capital in its construction by the issuance of first-mortgage bonds on the road at the rate of \$5000 per mile, which, from rough estimate, our engineer believes will be ample to place the road, together with rolling stock, in good running order. We will, as soon as ready, submit bids to construct the road. We look upon this proposition as a safe and remunerative investment, and cordially invite capitalists looking to this class of property to investigate our territory, its capabilities and possibili-

ties of development which awaits it by the construction of a railroad, at present so remote from any near transportation facilities. Our first work will be on that portion between this place and Church Point, and thence on to the Texas & Pacific Railway, building the road south of here to Abbeville and Vermillion bay last."

A New Trunk Line.

The rapid progress made in building the Kansas City, Pittsburg & Gulf system, projected between Kansas City and Sabine Pass, on the Gulf of Mexico, is attracting much attention in these days of so many "paper projects." Increased interest has been manifested of late from the fact that bonds of this company to the extent of over \$2,000,000 have been taken by English investors. President Martin, of the company, in a letter to the MANUFACTURERS' RECORD on the present status of the work, writes as follows:

"The Arkansas Construction Co. has raised a considerable sum of money with which to extend the Kansas City, Pittsburg & Gulf Railroad, and we expect to complete the coming year something like 200 miles or more. Our arrangements for the construction of track and bridge work are practically completed. At Kansas City our terminals are ample, and, as a whole, the best that are here. We connect with all of the railroads entering the city, as well as with all of the principal manufacturing and mercantile industries in the city and suburbs.

"We think we have good reason to believe that, when completed from Kansas City to or near Shreveport, we will have one of the best paying roads for its length in this country. Even now, with our disconnected links, we are doing a very good business, and it is improving month after month. This system will bring the grain and stock markets of Kansas City, the central city of our great land, 200 miles nearer deep water than by any other route. The shipments south from Kansas City after lake navigation closes is growing each year, and often averages 150 cars a day during the winter and spring months on corn and wheat alone."

Report Denied.

The report recently so generally published that the Baltimore & Ohio Railroad has made considerable extensions of its West Virginia interests by the purchase of additional lines has been denied.

Railroad Notes.

THE Savannah Railway & Terminal Co. has elected as president, Pope Barrow; general manager and superintendent, James W. McAlpin, Jr.; secretary and treasurer, Walter P. La Roche.

THE Pennsylvania Railroad has made an agreement with the Merchants & Miners' Transportation Co. whereby the latter carry all the former's ocean freight from Baltimore to Southern ports.

THE Pennsylvania Railroad has removed its Southeastern headquarters, heretofore located at Lexington, Ky., to Atlanta, and by that change Mr. George R. Thompson, Southeastern passenger agent of the Pennsylvania lines, is located in Georgia.

At a recent meeting of the directory of the San Antonio & Gulf Shore Railroad Dr. G. G. Clifford was elected a director and also president of the company. V. G. Colley was elected vice-president, and Gov. John Ireland and Judge W. W. King, general attorneys.

OVERTURES have been made for the purchase of the Owensboro, Falls of Rough & Green River Railroad, extending from Owensboro to Horse Branch, Ky., on the Chesapeake, Ohio & Southwestern, a distance of 41.7 miles. The purpose is to make the road a part of the Indianapolis, Rockport & Chattanooga Railroad. Under

the plan an extension to Bowling Green, Ky., is proposed.

In the United States Circuit Court at Charleston, S. C., Judge Simonton, in his decision in the case of John H. Inman, James Swan and Bernard S. Clarke versus the Asheville and Spartanburg Railroad, signed a decree for the sale of the road in Spartanburg within the next thirty days.

THE City & Suburban Railway Co., of Baltimore, has made the latest addition to its roads by buying the Lake Roland Elevated road and branches, twenty-two miles in all. The price paid was \$1,250,000, or \$250,000 more than the company's bonds, issued for construction about a year ago.

DURING the five months which have elapsed since its reorganization the gross earnings of the Baltimore & Lehigh Railway Co. have amounted to \$66,814; operating expenses, \$51,396; net earnings, \$15,418. This shows an increase in net earnings of \$9199 over the same period of 1893.

As a preliminary towards an early reorganization of the Cape Fear & Yadkin Valley Railroad, E. S. Martin, of Wilmington, N. C., has been appointed special master in the foreclosure proceedings. All claims against this company, which is now in the hands of General John Gill, of Baltimore, as receiver, must be filed with the special master by February 1.

A SPECIAL meeting of the stockholders of the Chesapeake & Ohio Railroad Co. is called for February 25 at Richmond, Va., to guarantee with other roads 4 per cent. bonds not exceeding \$5,000,000 in amount of the Louisville & Jeffersonville Railroad. The proposed plan provides the Chesapeake & Ohio with terminal and track facilities at Louisville and the use of the bridge across the Ohio river.

A STOCKHOLDERS' meeting of the Missouri, Kansas & Texas Railway Co. has been called for February 14 to ratify plans of the management for building two branches. One is a spur of sixteen miles to the coal mines owned by the company in Southeastern Kansas, and the other is to fill a gap of about thirty-five miles, connecting the Kansas City and St. Louis divisions. Five per cent. gold bonds at the rate of \$20,000 per mile of new lines and equipment are to be issued to pay for the work.

IT was stated in the MANUFACTURERS' RECORD a few weeks ago that arrangements were being made for the construction of a very large steel plant at Alexandria, Ind., to be a consolidation of the New Albany (Ind.) Rail Mill and of the Valley Steel Co., of Belleville, Ill. All of the details and contracts for this plant have now been fully completed, and the work of construction was begun last week. It is stated that inside of six months Alexandria will have in operation one of the largest steel plants in the country. The company has a capital of \$500,000, with some liberal additions in the way of a large amount of property secured as a bonus. It is stated that the works will consist of a general Bessemer steel plant, including a rail mill. The people interested in this enterprise have also organized a belt railway company with a capital stock of \$150,000. They will construct a belt line around the city. Among those actively engaged in working up this undertaking were Boyce, Jeffers & Penney, of Chicago, and Mr. P. N. Clarke, of Louisville, Ky., president of the Alexandria Company.

THE Philadelphia Steamship Co., which has been running vessels to Florida ports from the former city, has decided to include Charleston, S. C., in its service, and will hereafter have weekly sailings between that port and the North. This shows how Northern companies are appreciating the South's constantly-increasing trade by water.

PHOSPHATES.

Florida Phosphates.

ORLANDO, FLA., January 8.

The new year gives promise of considerable activity in phosphate mining. In the hard-rock region there are contracts ahead on the part of the miners who have not joined the associated companies, which will keep them busy for the better part of the year. It is even thought that some of them will have to go into the market to fill these contracts made. If this is so, they will have to catch as catch can, or pay a round price for the goods. The associated companies expect to have a good business during the year. They will govern their output by the demand, and avoid any special depression in prices which would follow an overstocked market. In this way prices are expected to remain good throughout the year, and still no material advance will be made of the product, the companies of the association expecting to get the benefit of their new arrangement out of the profits the middlemen have heretofore enjoyed.

In the land pebble mining the situation is much unchanged. It is understood that at present prices, with close mining, there is still a ribbon-width of profit. An association there existing has fallen through and the companies stand each for itself. The bulk of this output goes to European ports, though the American dealers are not far behind the foreign buyers. In the river pebble mining there has been a new combine, which, it is thought, will be of vast advantage to that branch of the industry.

The Land Pebble Phosphate Co. is loading the British steamship Beechdene with a cargo of pebble phosphate at Port Tampa. The schooner Olive is loading with a cargo of pebble phosphate for an American port at Port Tampa. The Massachusetts Phosphate Co., now located about six miles south of Bartow, is getting ready to move the entire plant to a new mining point, the exact location not yet determined, several points being in view.

The Compagnie des Phosphates de France shipped from the port of Fernandina during the year 1894 37,586 tons of phosphate rock. The shipments from the Dunnellon Company for 1894 aggregated 25,000 tons.

J. H. JONES.

Fernandina Shipments in 1894.

The development of the phosphate interests of Florida is illustrated by a report sent out by the Florida Central & Peninsular Railroad Co. To this company much credit is due for the facilities it has afforded at its Fernandina terminal for handling and shipping phosphate. The report it issues gives a tabulated statement of all shipments from Fernandina during 1894. The record shows the sending out of seventy-two cargoes during the year from Fernandina to English, French, German, Italian, Scotch, Swedish and coastwise ports. The aggregate numbered 135,509 tons. The figures for previous years in tons are as follows:

1893.....	126,800
1892.....	124,950
1891.....	51,300
1890.....	10,428

A comparison of 1890 with the results for 1894 shows the remarkable growth of the phosphate industry of Florida within the past four years.

Phosphate Markets.

OFFICE MANUFACTURERS' RECORD, BALTIMORE, January 17.

In phosphate circles trade is certainly quiet, with few indications of an improvement in the near future. There is very little rock selling, and manufacturers are only taking to supply immediate wants. There is nothing in the situation at points of production that is startling, but business moves on in a quiet way, with every prospect

of a fair season. The market is very steady, with prices for South Carolina as follows: Crude rock, \$3 75 to \$4.00; hot-air dried, \$4.25 to \$4.50, and ground rock, \$6.50, all f. o. b. Charleston. Florida rock is quoted \$3 25 to \$3.50 for river pebble, and \$4 65 to \$4 75 for land rock f. o. b. Tampa or Punta Gorda. There are no local charters reported. The market in New York for charters is unchanged and rates are easy. The steamers Albania and Annandale were chartered on the other side for phosphate at p. t.

FERTILIZER INGREDIENTS.

The market for ammoniates has ruled quiet during the past week, and while there has been numerous inquiries, the volume of actual business is light. The offerings are liberal and prices for some articles a shade easier. There is a moderate trade in blood and tankage, and values close about steady at easier figures. Nitrate of soda is steady at former quotations. Spot goods in New York of prime quality are obtainable at \$1.95. Importers are quoting \$1.92 to \$2.00 for goods to arrive.

The following table represents the prices current at this date:

Sulphate of ammonia, gas.....	3 15@ 3 20
Sulphate of ammonia, bone.....	3 15@ 3 20
Nitrate of soda.....	2 10@ 2 15
Hoof meal.....	1 90@ 1 95
Blood.....	2 05@ 2 10
Azotine (beef).....	2 10@ 2 15
Azotine (pork).....	2 10@ 2 15
Tankage (concentrated).....	1 80@ 1 85
Tankage (7 and 30).....	1 85 and 10
Fish (dry).....	17 50@ 18 50
Fish (acid).....	22 00@ 23 00

CHARLESTON, S. C., January 12.

The past week has produced little change in the phosphate market. Rock goes off very slow, and even that which has been already contracted for and sold is not being delivered immediately to the purchaser; consequently the miners are kept pretty well stocked up. Inquiries are numerous from both coastwise and domestic, and indicate a better condition of trade within a few months. Fertilizer shipments are behind last season's, owing to the low price of cotton and the doubtful condition of affairs among the farmers. The river companies are in excellent trim and working full force. The water shipments for the week were: M. L. Patton, 850 tons for Baltimore; C. L. Godfrey, 800 tons for Baltimore; O. C. Schmidt, 900 tons for New York; A. D. Bacon, 800 tons for Baltimore. The shipments since September 1 were 31,069 tons crude rock and 715 tons ground, against 39,916 tons crude and 300 tons ground rock for the same date last year.

Phosphate and Fertilizer Notes.

THE British steamship Lord Erne, said to be the largest vessel ever entering the port of Brunswick, Ga., cleared on the 11th inst. for Garston Dock, England, with 2046 tons of phosphate and other merchandise valued at \$214,000.

THE Pittston Hard Rock Phosphate Co., in Columbia county, Fla., has lately bought the railroad known as the E. B. Bailey road, running south from Fort White, Fla., and will extend it to some point on the Suwannee river. The output of phosphate from the Fort White district is expected to be about the same as that of 1894.

ABOUT 100 representative planters of Laurens county, S. C., some of them among the largest growers in the State, recently held a meeting and appointed a committee to confer with the fertilizer companies about rates and terms. The farmers of Abbeville and York have called similar meetings to convene on the 22d inst.

WM. A. TRUBENBACH, general manager for the Anglo-Continental (late Ohlen-dorff's) Guano Works, reports the following vessels loading phosphate at Savannah for the company: Steamships Gleadowe, 2500 tons, and Dorset, 1100 tons. The steamship British Crown is taken to load 2800 tons of phosphate at Port Tampa, while the steamship Norlands has been booked to

load a cargo in February from Fernandina. Another steamer will follow in February from Port Tampa and one from Savannah, names not yet known.

MR. JOHN BEATY, general manager for the Bone Hill Phosphate Co., near Bartow, Fla., arrived at that city last week and immediately proceeded to the company's property. The work on the large plant which the company is about to erect has already commenced. Machinery has all been shipped, and the work will be pushed as rapidly as possible.

THE collector of customs at Port Tampa, Fla., shows the exports of phosphate by months for the year 1894 as follows: January, 8445 tons; February, 4593 tons; March, 19,555 tons; April, 14,147 tons; May, 19,327 tons; June, 11,829 tons; July, 13,260 tons; August, 26,017 tons; September, 23,327 tons; October, 17,142 tons; November, 1666 tons; December, 11,817 tons.

THE Brunswick Terminal Co., of Brunswick, Ga., reports the following shipments of phosphate for the month of December, 1894: Steamship Ramore Head for Liverpool with 365 tons, steamship Cordora for Newcastle with 2199 tons and the steamship Lord Erne for Garston with 2045 tons. Shipments previously reported for 1894 amount to 67,854 tons, making a total for the year of 72,464 tons.

Heading for Deep Water on the Gulf.

[Special Correspondent, MANUFACTURERS' RECORD.]

BEAUMONT, TEXAS, January 12.

Since the coming of the Kansas City, Pittsburg & Gulf Railroad officials to Beaumont a few days ago there has been considerable speculation among the people here as to the early development of Sabine Pass. The party spent several days in this city and at the Pass looking over the ground carefully, and the information as given out is that this new north and south line will pass through Beaumont and end at Sabine Pass. This means much to both of the cities mentioned.

Nothing definite has yet been made public. The officials, however, expressed themselves freely upon the deep-water possibilities at Sabine Pass, and also upon the future of the unopened agricultural lands between Beaumont and the gulf. As for the lumber interests, the Beaumont manufacturers are no less eager for such a line to the North than are the landholders, both of whom predict a large increase in population and wealth to Jefferson county when this road shall have been opened.

There is no doubt that this end of the road would pay well. The lumber trade in itself is worth several hundred thousand dollars annually in freights, and is practically in its infancy. The attractions for immigrants to Southeast Texas are being widely advertised, and within a few years this section will be thickly settled by rice farmers, while north of Beaumont the road runs through a magnificent territory of lumber, iron, lead, coal and other minerals almost its entire length.

At Sabine Pass ample terminals can be secured, and in case a joint arrangement can be made with Kountze Bros., who are large holders of property there, no better terminal facilities can be found on the gulf. The question of deep water is of secondary interest, as already there are seventeen feet, and every additional foot that is dredged "holds."

Still another railroad is heading towards Beaumont from Bolivar Point, opposite Galveston, but this is of small importance as compared with a north and south line.

FREDERIC J. COOKE.

THE trade of the Johnston Line of vessels between Baltimore and Tampico, Mexico, has increased to such an extent that an additional whaleback steamer has been put in the service.

TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department, on pages 386 and 387.]

South's True Road to Wealth.

COLUMBUS INSURANCE & BANKING CO.,
COLUMBUS, MISS., January 8.

In giving my views on cotton mills I enter on a subject in which I am so much interested that I hardly know when to stop. It has always been and still is my opinion that the true road to wealth for the South lies through the multiplication of these mills until the great bulk of our peculiar staple is sent forth as manufactured goods, with all the profit accruing to the land which produced the staple. We have one cotton mill in our town (capital \$150,000, all furnished by our own citizens), which is doing remarkably well. I wish we had a dozen more, but as we haven't the capital ourselves, wish we could bring in outside capital. The section immediately around us is a rich agricultural section, sending this year to our market about 40,000 bales of the most desirable grades of cotton. The best coal is laid down in our town at \$1.65 per ton, and the two banks have control of desirable sites for cotton mills, which I am satisfied they would be glad to invest at reasonable prices in the stock of any good company which would put up mills on these sites. W. H. LEE, Cashier.

Revival in Cotton Trade.

Hubbard, Price & Co., in a recent review of the cotton market, say:

"The feature of the market this morning was the publication of the exports of yarns and cloths from Great Britain for the month of December and for the entire year. And it is interesting to note that, in spite of all the complaints from Manchester which we have heard over and over again during the last twelve months, these exports are the largest on record, surpassing those of 1890. The figures show that the improvement over last year is 12½ per cent., and 5 per cent. over the largest previous year. This shows a great revival throughout the world in the consumption of cotton, and undoubtedly was the reason for the improvement of one point in Liverpool today. As it is difficult to convince the holders of cotton that such a condition of consumption can exist without having some effect upon the price of the raw material, either now or in the future, it is evident that the consumption of cotton is increasing at a more rapid rate than that of the last four years, and that a large crop will be required to supply this demand."

Enlargement of a North Carolina Mill.

The stockholders of the Raleigh Hosiery Yarn Mills held a meeting on January 10 and decided to add \$50,000 to their capital stock, and ordered the size of the mill and the amount of the machinery to be doubled. They also declared a 4 per cent. semi-annual dividend.

Textile Notes.

PROMINENT citizens of Athens, Ga., will endeavor to secure the location of a cotton mill.

THE citizens of Burlington, N. C., talk of forming a company to establish finishing mill and bleaching.

THE stockholders of the Rosalie Cotton Mills Co. held its annual meeting at Natchez, Miss., on the 14th inst.

THE stockholders of the Manchester Cotton Mills at Fort Worth, Texas, held a meeting on January 9 and authorized the sale of \$60,000 of bonds for enlarging the plant.

It is stated that the Congaree Cotton Mill, at Columbia, S. C., which has been idle for two years, will be put in operation in the near future. An expert is to over-

haul the machinery shortly for Pennsylvania capitalists.

THE proposed new mill near Weldon, N. C., by the Roanoke Rapids Power Co. is to be equipped with 12,000 spindles and 400 looms, and a proposition has been made for doubling the size.

A NUMBER of business men of Montgomery, Ala., held a meeting on January 11 to consider plans for a 15,000-spindle cotton mill. It is said that over half the required capital was subscribed.

THERE is a movement afoot at Fort Worth for the organization of a company to erect a \$200,000 cotton mill under the auspices of the Texas Land & Colonization Co. A \$50,000 bonus is assured, and \$50,000 of stock has already been subscribed for.

THE annual stockholders' meeting of the Gastonia Cotton Manufacturing Co. was held at Gastonia, N. C., last week. A dividend of 10 per cent. was declared, and R. C. G. Love was re-elected president, also Mr. John F. Love, secretary and treasurer, and Mr. Geo. A. Gray, superintendent. The reports of the officers were flattering, and the business of the company shown to be in a good condition.

THE stockholders of the Alpha Cotton Mill, of Charlotte, N. C., held a meeting last week and elected the following directors: R. M. White, J. H. Van Ness, F. R. Durham, A. C. Summerville, J. C. Long, B. F. Withers, Dr. R. J. Brevard, R. H. Jordan, C. Scott, John W. Miller. The affairs of the mill were found to be in a flourishing condition, and the stock dividend of \$8.50 per share has been paid.

DURING the past week four more New England cotton-manufacturing companies have made known their intention to establish plants in the Southern States. They are the Merrimack Manufacturing Co. and the Boott Cotton Mills, of Lowell, Mass.; the Nashua Manufacturing Co. and the Jackson Company, of Nashua, N. H. The Merrimack Company will increase its capital stock by \$1,000,000, the Nashua Company also by \$1,000,000, and the Jackson Company by \$700,000.

THE stockholders of the Walhalla Cotton Mills, chartered several weeks ago at Walhalla, S. C., held a meeting last week and elected a board of directors. The latter are Messrs. J. D. Verner, D. P. Robins, J. J. Norton, S. P. Dendy, W. J. Stribling, W. A. Strother and C. W. Pitchford. Mr. Verner was chosen president and treasurer, and Mr. Robins, secretary. Over \$50,000 of the capital stock of the company has been subscribed, and a payment of 20 per cent. of same has been called for February 1. It is now reasonably sure that this plant will be built.

THE annual meeting of the stockholders of the Raleigh Cotton Mills, of Raleigh, N. C., was held last week. The old officers—C. G. Latta, president; Chas. E. Johnson, vice-president; J. S. Wynne, secretary and treasurer, and H. B. Greason, superintendent—were re-elected. The directors reported a 4 per cent. semi-annual dividend ready for payment. The stockholders resolved to increase the capital stock of the mills to \$50,000, and to build an addition to the present plant. This enterprise is growing and prospering, and shows evidence of good management.

THE Matthews Cotton Mill, of Selma, Ala., is now turning out 20,000 yards of cloth per day, but at this rate the officials have found it impossible to keep up with their orders, and it has been decided to run the mill night and day. In order to accommodate the additional force of 225 hands required for the night shift, twenty houses of five rooms each are being built near the mill, and it is quite probable that twenty more will be contracted for as soon as those under construction are completed. The mill is shipping goods to Boston, New York,

San Francisco, New Orleans and other large jobbing points.

THE annual meeting of the stockholders of the Cabarrus Cotton Mills, of Concord, N. C., was held last week. Last August the capital stock of the company was increased \$29,900, making it \$100,000, in order to erect an additional building and equip the same with machinery. The building is about completed and the machinery is now being put in the new mill, which it is hoped to have in operation by February 10. This will give the mill 246 looms and 4416 spindles. New tenement houses have also been built. A semi-annual dividend of 4 per cent. was declared.

THE annual meeting of the stockholders of the Charlottesville (Va.) Woolen Mills was held last week, and the officers' reports, setting forth the operations for the year 1894, were read and approved. The report showed that a dividend of 7 per cent. out of the earnings of the past year had been declared upon the common stock, and that the operations for the past year, considering the general depression in business, were quite satisfactory. H. C. Marchant was elected president; C. A. Furbush, vice-president; L. T. Hankel, secretary and treasurer, and they, together with Messrs. William Hotopp, John L. Cochran, R. P. Valentine and John L. Cochran, Jr., were elected as directors.

THE regular annual meeting of the stockholders of the Odell Manufacturing Co., of Concord, N. C., was held last week. The annual report shows the mills to be in good condition. Notwithstanding the past year has been one of the duller in trade generally, the Odell Mill has been able to work on full time as usual, pay its operatives good and satisfactory wages and make fair profits for its stockholders. During the past year this plant manufactured 17,866,208 yards of goods and 156,062 seamless bags. The mills were run 301 days during the year. There was paid out for cotton \$234,245 20; to operatives, \$126,502 60; for wood and coal, \$24,548 58; for taxes, \$3212 13. A semi-annual dividend of 4 per cent. was declared by the directors.

THE annual meeting of the Statesville Cotton Mill stockholders, of Statesville, N. C., was held on Monday last, and the meeting was well attended. Mr. W. F. Hall, Jr., was elected chairman of the meeting and Mr. J. A. Brady, secretary. The officers made their annual reports, which showed the affairs of the company to be in excellent condition. The same board of directors was re-elected. The officers were also re-elected as follows: Wm. Wallace, president; J. W. Copeland, vice-president; T. D. Miller, secretary and treasurer, and D. A. Tompkins, engineer. The mill was designed for 6000 spindles and 180 looms. The looms are all in, about one-third of them being already in operation; the remainder will be started up in the course of a couple of weeks. It was decided to put in the remainder of the spindle machinery at once, and the engineer was instructed to proceed at once to have this determination carried out.

THE Springfield (Mass.) Republican is having a hard time in trying to argue against fact. It recently made the assertion that Southern mills do not make as fine goods as turned out by New England mills, but has been compelled to take back what it said and acknowledges its fault as follows: "H. A. Belin, of Charleston, S. C., disputes the claim that the Southern cotton mills cannot or do not make the fine goods manufactured in New England, and he sends the Republican a sample of cloth made by a South Carolina mill in proof of his contention. We shall have to give up to him in this case at least. Nor is there any reason why the Southern mills should not make fine goods with machinery so far perfected as it is, and skilled labor so available as it is or must soon be in that section."

THE MANUFACTURERS' RECORD admires the Republican's honest admission of its mistake. If all Northern papers would do the same we would not see so much fiction and so little fact published about the South.

SPINNERS North and South are reported running on full time, and fair margins of profit. India, China and Japan show signs of an increasing demand. Manchester reports are more flattering; about 20,000,000 pounds of yarn were exported in December, against 16,508,000 for December, 1893, and for the calendar year 1894 238,452,100 pounds, against 206,601,600 in 1893. Cloth exports were 5,313,452,100 yards, against 4,653,501,300 yards in 1893. General manufacturing business is reported in better condition. The crop has been grown under most favorable weather conditions on record. A year ago Southern railways were busy transferring guano to planters, who agreed to pay seven cents for cotton to be grown in 1894; now little or no fertilizer material is being transferred or sold. Guano manufacturers are now offering to pay five and a-half cents for cotton in 1895 in payment for fertilizer material to be delivered this spring. Cotton and cotton goods the world over are at near minimum prices. Many think the worst positions of credits, finances and prices have been passed, and that any change will be for the better. It is certainly true, "when things get to their worst they mend." The visible supply at Northern ports is small; exports continue on a liberal scale. Investors appear confident; bears not aggressive; sentiment appears to favor higher prices.—Clapp & Co.'s Financial Letter.

What Its Work Has Been.

BIRMINGHAM, ALA., January 8.

Editor Manufacturers' Record:

Having been a careful reader of the MANUFACTURERS' RECORD and watched its well-directed efforts to aid the South in developing its great resources, it gives me great pleasure to state that I have found it an able advocate of her varied interests. Every enterprise in operation, as well as those in prospect, receives attention. It shows what may be accomplished by small industries, as well as those of greater magnitude. The fertility of the soil, the mildness of the climate, their adaptability to a great diversity of agricultural and horticultural productions, the peculiar advantages of every locality when properly understood, the rapid development of the vast deposits of coal, iron, stone, gold and other valuable minerals, will bring great profit and commercial independence to those availing themselves of these combinations.

While financial depression, augmented by declining prices, disaffection and gigantic strikes, threatened disaster and ruin, this journal counseled moderation and caution in every kind of business, and announced every improvement with a cheerful and buoyant spirit, inspiring hope and confidence in the minds of all classes, and showed that industry and economy would surely bring prosperity and commercial independence. The great results of these well-directed efforts cannot be estimated, and its patronage should be greatly increased till prosperity is brought to the entire country. Those desiring to keep pace with our improvements in all our diversified interests must have some medium from which information can be drawn, and I am not acquainted with any other journal so efficient in giving the news of these improvements as the MANUFACTURERS' RECORD.

J. O. PATTON.

THE principal railway companies entering New Orleans have agreed to furnish wharf room free to all vessels engaged in the fruit trade unloading in that city. An effort is being made to develop trade in Mobile by establishing a free wharf system also.

COTTONSEED OIL.

This department is open for the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

New Cottonseed Cleaning Company.

The American Manufacturing & Exporting Co., of Savannah, Ga., has leased a large warehouse in that city and will begin operations within a few days. The company proposes to buy cottonseed with the lint on it, remove the lint and sell the cotton and seed separately. Mr. O. T. Bugg, of Baltimore, who is largely interested in the project, is superintending the preliminary arrangements for beginning the work.

The Market for Cottonseed Products.

NEW YORK, January 15.

The cottonseed-oil market has not declined since date of last report, but, on the contrary, exhibits an attitude of a decidedly bullish character. Bids shading the under-quoted figures are firmly declined, and the position adopted by holders generally bespeaks their unabated confidence in the character of prospective trading. Owing to the increased proportion of choice crude reserved for refining in the South, the barrelled variety is scarce in this market and held at 24½ cents. Bulk crude is held at the mills at prices ranging from 20 to 21½ cents, as to location and size of order. Bids from Southern Europe for summer yellow are of a more substantial character, yet appreciably below current quotations, 28½ cents being rejected. Exports to Germany have been of a limited character, choice yellow at 30 cents being above the average purchaser's views. White oil is in better request at 33 cents. Several lots of red oil were sold at 26½ cents. One parcel of the latter, a 175-barrel lot, was really an excellent off-grade, although changing hands at the figure quoted. Very much less off-grade yellow finds its way to the soap-kettle than is pleasing to holders of that product, the natural sequence being an increase instead of diminution of stocks. Rather than concede the merest fractional reduction, holders prefer to permit accumulations, so that surplus storage holdings is at this writing a prominent feature of the trade. It may be added for this that the foregoing applies equally to the other grades, excepting, perhaps, white oil. A much larger proportion of seed remains to be crushed than is generally supposed, and millmen in very many instances are making determined effort to produce better results than have characterized the work of former years. The keen competition which obtained during 1894 superinduced lower values all along the line, and has had the effect of introducing many economies in the manufacturing processes hitherto considered unworthy of attention. The lesson which adverse conditions taught many of the crushers has been a trying one, but it bids fair to be lasting in its beneficial results. Reference will be made in succeeding report to an innovation in oil-milling which very materially facilitates a retrenchment of abnormal waste. The known sales expected during the week aggregate about 100,000 gallons crude in barrels at 24 to 24½ cents, with 10,000 gallon off at 23½ cents, to which must be added seven tanks loose at mills at 20 to 21½ cents; 60,000 gallons of choice yellow at 30½ to 31 cents, 278,000 gallons prime summer yellow at 29 to 30½ cents, 45,000 gallons white oil at 33 cents, although a lot of 100 was sold on a basis of 32 cents; 18,000 gallons off yellow at 27¼ to 28 cents, with red oil in quantities amounting to about 15,000 gallons at 26½ to 27¼ cents. Present quotations are as follows: Crude, prime, 24½ to 25 cents; f. o. b. mills, 21 to 22 cents; crude, off, 23 to 23½ cents; prime yellow summer, 29 to 30 cents;

butter, 31 to 32 cents; summer yellow, off quality, 27½ to 28½ cents; white summer, 32 to 33 cents; yellow winter, 36 to 38 cents; white winter, 37 to 39 cents; soap stock, 1 to 1½ cents per pound.

Cake.—The abnormally low value of cake as a stock-feeding product has shown no appreciable betterment, and but a very trifling descent may attract the general attention of agriculturalists having in view the product as a fertilizer. The fact is, demand for cake is far removed from being on a parity with that of oil, and the future success of the business will largely depend on the action of Southern manufacturers in developing the consumption of cake as a feeding product within the confines of the United States. The difficulty experienced in releasing cake at remunerative figures reduces the value of oil to a lower level, and in order to purchase sufficient seed supplies to turn out the regular or approximate proportion of oil and cake, where the financial stability of the crusher is not commensurate with the needs of the case, oil is sold at a material reduction, while it is known that cake has been sold at \$10.00 per ton at the mills. New Orleans prices, \$16.00 to \$17.00 per ton, cake or meal, and \$18.00 to \$19.00 spot or to arrive.

Cottonseed-Oil Notes.

THE Terrell Cotton Oil Manufacturing & Refining Co., of Terrell, Texas, contemplates enlarging and repairing its extensive plant. The company will commence repairs early in the summer and likely complete the work in time to commence operations in the early fall of the current year.

THE market for cottonseed products at Houston, Texas, is at present somewhat demoralized. Crude oil is down to nineteen cents in tank lots, and refiners are not taking much at that figure. Cottonseed meal for fertilizing purposes is selling for \$10.00 per ton, and for feeding at \$15.00. All through the season the meal market has been dull and unsatisfactory, while large lots have frequently been rejected on account of condition. Hulls have advanced to \$4.00 per ton at mills. Mills throughout the State have not done the business they expected during the season.

IN New Orleans the market for cottonseed products is quiet and steady, with prices for goods in the hands of receivers ranging as follows: Cottonseed, \$8.00 per ton of 2000 pounds delivered; cottonseed meal at depot, \$16.00 per short ton for export and \$16.50 per long ton f. o. b.; oil-cake for export, \$16.50 per long ton f. o. b.; crude cottonseed oil at wholesale or for shipment, 23 to 24 cents per gallon for crude and 20½ to 21 cents for loose; refined cottonseed oil, 26 to 27 cents for prime in barrels; cottonseed hulls, 20 to 25 cents per 100 pounds delivered; linters—A, 2½ to 2¾ cents; B, 2 to 2¼ cents, and C, 1½ to 1¾ cents.

Commendation from Sugar Producers.

COMMERCIAL INTERESTS OF THE STATE
OF LOUISIANA,
NEW ORLEANS, January 8.

Editor Manufacturers' Record:

Excuse the apparent delay in acknowledgment of your recent commendations of our petition to Congress in regard to the sugar bounty.

We were more than gratified by it, because of the position your paper holds throughout the entire country. You have no idea how it gratified us to have our position appreciated and supported as ably as was done by you.

Your comments were telegraphed to the Times-Democrat and Picayune from Washington, so that wherever they go throughout the State your services to us will be recognized and acknowledged, as it was the first work spoken by outsiders in our present campaign. With renewed thanks, we remain, Yours very truly,

WM. B. BLOOMFIELD, President.

FINANCIAL NEWS.

Maryland Trust Co.

At the annual meeting of the stockholders of the Maryland Trust Co., of Baltimore, three additional directors were elected, increasing the board to its full membership. The new members are Walter B. Brooks, Jr., of Sanford & Brooks; Clayton C. Hall, of the Maryland Life Insurance Co., and Frederick W. Wood, president of the Maryland Steel Co. The other directors, all of whom were re-elected, are: Wm. A. Marburg, H. J. Bowdoin, Basil B. Gordon, Lloyd L. Jackson, J. Willcox Brown, Fred M. Colston, Joshua Levering, Frank Brown, Leopold Strouse, Charles Marshall, H. A. Parr, B. N. Baker, Andrew D. Jones, James Bond, Alexander Brown, T. K. Worthington, J. D. Baker, Walter S. Johnston, August Belmont, John B. Garrett and A. A. H. Boissevain.

In wealth and financial importance this directory is especially strong. Many leading financiers and well-known business men are among its members. This company's operations have largely been in the Southern States, and since its organization some months ago it has handled several transactions of magnitude upon whose successful issue the rehabilitation of important railroad companies depended. The company was a decided acquisition to the business interests of the South, as its resources, coupled with its varied connections, enables it to handle financial matters of the largest scope. Probably no trust company in America has a stronger list of stockholders, which includes many of the most noted financiers of this country. Col. J. Willcox Brown is president of the company; Lloyd L. Jackson, vice-president, and J. Bernard Scott, secretary and treasurer.

New Financial Institutions.

The Dowlan Bank, a private bank at Fort Valley, Ga., is to be organized under a State charter.

A bill has been introduced in the North Carolina legislature to incorporate the Carolina Mutual Insurance Co. of Charlotte.

Bank of Gentry, Ark., has been chartered by W. D. Wasson, R. J. McGaugh, G. W. Woodworth and others. The capital stock is \$25,000.

Bank of Prescott, Ark., has been chartered with J. T. Brooks, president; J. M. Pittman, vice-president, and J. S. Reagan, cashier. The capital stock is \$50,000.

National Building Association of Baltimore has been chartered by Ernest J. Knabe, Jr., Clinton P. Paine, Wilbur F. Jackson and others. The capital stock is not to exceed \$1,000,000.

New Bond and Stock Issues.

Montgomery, Ala., proposes issuing 6 per cent. 10-year bonds of not lower denomination than \$50.00 for street improvements.

The West Asheville (N. C.) Improvement Co. has issued \$100,000 of first-mortgage bonds, with the New York Guaranty & Indemnity Co. as trustee.

Application has been made by Bristol, Tenn., to the Tennessee legislature for authority to issue bonds to the amount of \$35,000 to fund its floating indebtedness.

The Manchester Cotton Mills, of Fort Worth, Texas, will issue \$60,000 of first-mortgage improvement bonds. The Texas Land & Colonization Co. will have the bonds in charge.

Hamilton county, Tenn., will apply to the legislature for authority to fund the floating indebtedness of the county to the amount of \$100,000 in 10-year bonds, with interest not exceeding 5 per cent.

The Sedalia & Brown Springs Electric Railway Co., of Sedalia, Mo., has issued \$80,000 of 20-year first-mortgage 6 per cent.

gold bonds. \$50,000 of the bonds are now ready for delivery and are being offered at par and accrued interest.

The Missouri, Kansas & Texas Railway Co. has filed in the county clerk's office at San Antonio, Texas, a trust deed on its proposed fifty-two and a-half miles of road from San Marcos to San Antonio in favor of the Central Trust Co. of New York to secure the issue of \$20,000 of bonds per mile on the proposed road.

Interest and Dividends.

Recent dividends include the following: Tallapoosa County Bank, Dadeville, Ala., 10 per cent.; Marietta (Ga.) Trust & Banking Co., 8 per cent.; First National Bank, Waycross, Ga., 4 per cent.; People's Bank, Talbotton, Ga., 8 per cent.; St. Charles Street Railroad Co., 2 per cent.; Donaldsonville (La.) Bridge Co., quarterly dividend of \$3 25 per share; German Fire Insurance Co., Baltimore, 5 per cent.; Peach Bottom Slate Co., of Harford county, Md., 2 per cent.; Caldwell Milling & Gin Co., 10 per cent.; Highland Park Manufacturing Co., 2 per cent., and Charlotte Savings Bank, 4 per cent., all of Charlotte, N. C.; Anderson (S. C.) Cotton Mills, 3 per cent.; Knoxville (Tenn.) Banking Co., 5 per cent.; Charlottesville (Va.) Woollen Mills, 7 per cent.; Pulaski (Va.) National Bank, 6 per cent.; Pulaski (Va.) Loan & Trust Co., 11 per cent.; Carolina Insurance Co., Wilmington, N. C., 3 per cent.; American White Lead and Color Works, New Orleans, La., 6 per cent.; Franklin Insurance Co., 3 per cent., and German Fire Insurance Co., 5 per cent., both of Wheeling, W. Va.

In addition to those already reported, semi annual dividends have been declared as follows: Eufaula (Ala.) Grocery Co., 5 per cent.; Capital City Insurance Co., Montgomery, Ala., 4 per cent.; Polk County National Bank, Bartow, Fla., 6 per cent.; Valdosta (Ga.) Savings & Investment Co., 4 per cent.; Citizens' Bank, Valdosta, Ga., 4 per cent.; Newnan (Ga.) National Bank, 4 per cent.; Louisville Insurance Co., 5 per cent.; Union Warehouse Co., 2½ per cent.; Bank of Kentucky, 4 per cent., all at Louisville, Ky.; United States Loan & Building Co., New Orleans, La., \$3.00 per share; Home Fire Insurance Co., 5 per cent., and National Fire Insurance Co., 3 per cent., both of Baltimore; Baltimore National Automatic Fire-Alarm Co., 1 per cent.; Lawrence Bank & Trust Co., Lawrenceburg, Tenn., 6 per cent.; First National Bank, Harrisonburg, Va., 5 per cent.; Augusta National Bank, 3 per cent., and National Valley Bank, 5 per cent., both of Staunton, Va.; Greensburg (Ky.) Deposit Bank, 8 per cent.; First National Bank, Meridian, Miss., 6 per cent.; Kingston (Tenn.) Bank, 3 per cent.; Hibernia Insurance Co., New Orleans, La., \$4.00 per share.

Financial Notes.

THE Mutual National Bank and the Traders' Bank of New Orleans, La., have consolidated.

THE business of the City National Bank of Birmingham, Ala., has been merged with the Berney National Bank of that city.

E. S. PEGRAM has succeeded J. D. Moore as cashier of the First National Bank of Gastonia, N. C. L. L. Jenkins is president.

It is announced that the First National Bank and the City Bank of Van Alstyne, Texas, have been consolidated under the name of the First National Bank.

THE stockholders of the National Bank of Augusta, Ga., decided at their annual meeting to apply to the comptroller of the currency for authority to reduce the capital stock from \$500,000 to \$250,000.

MESSRS. W. K. HOLT and M. P. Watkins, of Chase City, Va., have formed full partnership as contractors, builders and dealers in building supplies.

added to the mill in the way of new machinery.

THE Hamlin handle factory and saw mill at Hamlin, W. Va., were destroyed by fire on the 6th inst. There was only a partial insurance.

G. D. DE JARNATTE, Mayfield, N. C., wants to correspond with dealers in dogwood and persimmon shuttle-blocks, hickory spokes, etc.

THE furniture factory at Alabama City, Ala., has increased its force of workmen, and is now turning out a good grade of furniture of various kinds and quality.

THE annual meeting of the Arkansas Lumbermen's Association, which was announced to take place at Hot Springs, was held in Little Rock on the 16th inst.

THE recent rise in the river brought to Roncerverte, W. Va., 8,000,000 feet of logs, and the St. Lawrence mill has resumed operations after being idle about thirteen months.

AMONG the clearances from Brunswick, Ga., during the past week were the steamship Jason with 140,000 feet of lumber for Jamaica, and the bark Australia for Rio Janeiro with lumber valued at \$8690.

THE Walterboro Dry-Kiln & Planing Co., of Walterboro, S. C., is doing a large business at present, and have a full force at work. The members of the company are A. W. Taylor, B. B. Cutino and W. Joseph Taylor.

THE Dickson-Mason Lumber Co., of Asheville, N. C., filed articles of incorporation on the 8th inst. The capital stock of the company is placed at \$100,000. The incorporators are Harvey M. Dickson, W. T. Mason and Louis M. Browne.

A SPECIAL from Parkersburg, W. Va., states that the situation on the 11th inst. was more alarming than at any time during the flood. All mills and factories on the south side are submerged. Lumbermen estimate their loss at \$250,000 already.

THE Standard Handle Co., of Knoxville, Tenn., has just completed a branch factory at Escoc, in Union county, near Maynardsville. Handles will be manufactured there and shipped to Knoxville for sale. Work will begin as soon as the weather moderates.

THE receipts of lumber products at the port of Norfolk for the month of December, as reported by the Chamber of Commerce, were as follows: Lumber 23,254,455 feet, logs 8,184,866 feet, staves 827,222, shingles 1,992,900 and railroad ties 3000 M.

THE sawing department of the Loomis-Hart Manufacturing Co., at Chattanooga, will resume operations this week, providing the logs come down in time. Latest advices report about 5,000,000 feet to arrive on the present rise in the Tennessee river.

IT is stated that large quantities of logs are coming down on the present rise in the Tennessee river. At Chattanooga a telegram was received from one of the oldest lumbermen on the river, stating that there are 30,000 logs in the booms of the Little Tennessee.

AMONG the clearances from the port of Jacksonville, Fla., were the schooners Lulie L. Pollard for Philadelphia with a cargo of 398,000 feet of lumber, and the Robert W. Dasey for New York with 290,000 feet. The steamships Iroquois and Cherokee, of the Clyde Line, both had lumber among their cargoes.

THE large saw mills of the Kyle Lumber Co., at Gadsden, Ala., have received the contract for a large portion of the lumber to be used in the \$600,000 cotton factory to be built at that place, and the mills have resumed operations. All the logging camps up and down the Coosa river have also been started.

THE well-known lumber firm of the Allen Bros & Wadley Lumber Co., manufacturers of yellow pine and oak, of Allentown, La., has sent a carload of lumber to

be sold for the benefit of the Nebraska sufferers. The grade was 18 and 20-foot 10-inch ship lap or grooved roofing, No. 1 common.

THE clearances of lumber from Mobile, Ala., during the week ending the 12th inst. amounted to 2,114,772 feet, and since September 1 they aggregate 23,014,802 feet, against 22,821,100 feet for the corresponding period last year. The exports of sawn timber amounted to 156,719 cubic feet for the week.

MR. ROBERT GAMBLE, of Tallahassee, Fla., has been appointed agent for Brocky & Walsh, Philadelphia cross-tie contractors, who are commencing extensive operations along the line of the Carrabelle, Tallahassee & Georgia Railroad and on the Ocklocknee, Sopchoppy and Crooked rivers. He will work over 300 men.

THE Spanish bark La Fortunada cleared last week from Jacksonville, Fla., and was towed out to the bar by a steam tug. This vessel crossed the bar drawing sixteen feet eight inches, being the deepest-draught vessel that ever left the port of Jacksonville. She had a cargo of lumber from Bucki's mills, and was bound for the Canary Islands.

THE shipments of lumber and timber from the port of Mobile during the month of December were as follows: Sawn timber, 4,837,000 superficial feet; deals, 7,016,000 feet; hewn timber, 186,018 cubic feet, and shingles, 210,000. The number of logs cleared were valued at \$1710. The total clearances of lumber and timber were valued at \$137,683.

IT is stated that a factory for the manufacture of brooms and veneering will be started in Wilmington, N. C., in the near future. A number of business men are interested in the project, and shares of stock have already been subscribed for. It is understood that a meeting will be held in a few days for the election of officers and directors of the company.

A SPECIAL from Parkersburg, W. Va., states that the largest run of logs and ties for ten years came out of Little Kanawha river on the 7th inst. About 40,000 logs and 100,000 ties drifted out, a great number of logs being caught, but most of the ties were lost. Captain Paden lost about 50,000 ties, and D. M. Miller, Page & Sons, Burns Bros. and the Parkersburg Mill Co. are among the losers.

A CHARTER was granted last week at Richmond, Va., to A. S. Urban, B. A. Grasberger, S. L. King, B. J. Grasberger and J. H. Urban to form a company to be known as the Richmond Butter Tray Co. for the purpose of manufacturing butter-trays. The capital stock is not to be less than \$1000 nor more than \$10,000. The officers are A. S. Urban, president; B. A. Grasberger, secretary, and S. S. King, treasurer.

A SPECIAL from Beaumont, Texas, states that the Village mills of the Texas Tram & Lumber Co. had broken the record on the 5th inst. on a one-circular-saw mill for a day's run of eleven hours, the total cut being 255,403 feet of long-leaf yellow pine. This cut is a remarkable one from the fact that 104,662 feet were of one and two-inch yard stock, the remainder of the material, 150,741 feet, being timber three by twelve and up. The cut is 65,000 feet in excess of any other on record.

MR. M. F. AMOROUS, of the Atlanta Lumber Co., has in view an exhibit at the Cotton States and International Exposition which will be an object-lesson of unique and startling character. It is proposed to combine all forms of woodworking machinery, from the log to the finished product. Logs will be brought from the forest and given to saw mills of various types, thence to driers, planers, finishers and woodworking machinery. It is proposed to make cradles, coffins and every-

thing in wood that comes between. This novel idea is a practical one, and the exhibit is expected to be one of the features of the exposition.

AT an annual meeting of the Lumbermen's Exchange, held last week in St. Louis, the secretary submitted his report showing the movement of lumber and timber for the year 1894, of which the following is an abstract: "The receipts of lumber by rail in this market during the year of 1894 were 45,762 cars, while during 1893 61,097 cars were received, showing a shortage of 15,335 cars. Taking 12,000 feet as an average car of lumber, the total receipts were: By rail, 549,144,000 feet; by river, 114,227,855 feet; logs by river, 31,233,315 feet, making a total for the year of 694,605,171 feet, against 855,217,030 feet in 1893 and 883,943,163 in 1892. The shipments by river for the year were 2,090,000 feet, and by rail 365,196,000 feet, making a total of 367,286,000 feet. The local consumption for the year was 327,319,171 feet."

THE Alabama Association of Lumbermen met in annual convention at Montgomery on the 11th inst. In the absence of the president, Mr. W. M. Smith, of Alco, Ala., Mr. W. M. Jordan, of Tallapoosa, was made chairman and presided throughout the meeting. The convention was in open session for a short time only, merely long enough to elect the following officers: Mr. M. W. Smith, president; Mr. F. L. Wagar, of Wagar, Ala., secretary, and the following board of directors: Mr. W. W. Wadsworth, of Wadsworth; W. H. Welch, of Garland; J. D. Hand, of Jemison; F. L. Wagar, of Wagar; W. M. Smith, of Alco, and W. M. Jordan, of Tallapoosa. The lumbermen were in executive session almost all day, and on adjournment the proceedings were not given to the press. It was understood, however, that the main object of the convention was to formulate a plan to perfect a more binding and effective organization, and to improve the condition of the lumber industry in the South, and particularly in Alabama. The convention adjourned to meet in Atlanta on the 1st of February.

THE annual meeting of the Lumbermen's Exchange of St. Louis was held last week in that city. There was a large attendance of members, and the retiring president, Mr. Lloyd G. Harris, presided. In his annual report Mr. Harris reviewed the transactions of the year. He said there had been a large increase in membership, and the career of the organization had progressed smoothly, affording cause for congratulations, in spite of the prevailing hard times. The report of the secretary was mainly of a statistical character. It shows receipts by rail during the year of 45,762 cars of lumber, against 61,097 in 1893 and 62,162 cars in 1892. The river receipts were 114,227,855 feet, compared with 101,133,730 in 1893 and 115,491,163 feet in 1892. The total receipts of lumber, averaging the cars at 12,000 feet each and adding arrivals of logs afloat, which last item in 1894 amounted to 31,233,315 feet, were 694,605,171 feet in 1894, as against 855,217,030 in 1893 and 883,943,163 in 1892. The officers and board members elected for 1895 were as follows: President, R. M. Fry; vice-president, N. Waldstein; directors, F. H. Smith, John J. Ganahl, A. H. Bone, Curtis M. Jennings, W. R. Poe, W. H. Richardson and Howard Watson.

THE Young Men's Business League of Roanoke, Va., wants to correspond with parties desiring to establish small industries, such as glove or shirt factory, etc.

ANOTHER Southern concern has successfully sold its goods at a port in the Pacific ocean. The Anniston Pipe & Foundry Co. writes the MANUFACTURERS' RECORD that it has shipped a lot of cast-iron pipe to Honolulu on order. It was sent by way of San Francisco.

Iron Markets.

CINCINNATI, January 12.

There has been about one full business week of the new year, and the verdict is that while things are not as good as they might be, at the same time they might be a great deal worse than they are. There was unquestionably a widespread expectation, as the old year closed, that the beginning of the new would see very marked improvement in the general business situation. These expectations have not been realized, and disappointment is the result. When actual facts are ascertained, however, it is found that a very respectable volume of business is in progress, and that the tendency is towards a slow increase. It is too much to expect, under the circumstances, any improvement in values, but there has been certainly no decline since the middle of December, and the strong sellers are in the main independent, and not disposed to make further concessions. This is particularly true in Southern irons. The largest companies rest confident in the belief that the few who are cutting under recognized market limits can supply only a small fraction of the amount of Southern iron required, and that they will soon get their order books uncomfortably full and be removed as a factor in the situation.

There has been an unusually large demand for small lots for immediate delivery, and these have been promptly supplied at ruling rates.

We quote for cash f. o. b. cars Cincinnati:

Southern coke No. 1 foundry.....	9 75@10 00
South. coke No. 2 dry, and No. 1 soft ..	9 25@ 9 50
Hanging Rock coke No. 1.....	12 00@ 12 50
Hanging Rock charcoal No. 1.....	16 00@ 17 00
Tennessee charcoal No. 1.....	14 00@ 14 55
Jackson county stone coal No. 1.....	14 50@ 15 00
Southern coke, gray forge.....	8 00@ 8 50
Southern coke, mottled.....	8 25@ 8 75
Standard Alabama car-wheel.....	15 50@ 16 50
Tennessee car-wheel.....	15 50@ 16 70
Lake Superior car-wheel.....	14 00@ 14 50

PHILADELPHIA, January 12.

The best indications we see of the improvement that is sure to come in the general iron and steel trade is the inquiry coming from railroads for equipments that they must now reluctantly bargain for. The Pennsylvania Railway heads the list; others are dropping into line. Such manufacturers as the Westinghouse Air-Brake Co. report inquiries that now seem heavy, but which in normal times would only be what they could expect. Buyers of Lake Superior charcoal metal, who usually buy enough iron in the fall to last them to the opening of the navigation, now find themselves in the market again, and must pay a heavy advance for their favored brands, owing to the high all-rail rate. The less said about prices for present delivery the better.

We quote for cash f. o. b. Philadelphia:

Standard Alabama No. 1 X.....	11 50@12 00
Standard Alabama No. 2 X.....	11 00@ 11 50
Strong lake ore coke iron No. 1 X.....	13 50@ 14 00
Strong lake ore coke iron No. 2 X.....	12 50@ 13 00
Lake Superior charcoal.....	15 00@ 15 50
Standard Alabama C. C. W.....	18 00@ 18 50

We quote for cash f. o. b. New York:

No. 1 standard Southern.....	11 50@12 00
No. 2 standard Southern.....	11 00@ 11 50
No. 1 standard soft.....	11 00@ 11 50
No. 1 foundry lake ore coke iron.....	13 50@ 14 00
No. 2 foundry lake ore coke iron.....	12 50@ 13 00
Lake Superior C. C. W.....	15 00@ 15 50
Southern C. C. W.....	18 00@ 18 50

We quote for cash f. o. b. St. Louis:

Southern coke No. 1.....	10 75@11 25
Southern coke No. 2.....	10 00@ 10 25
Southern coke No. 3.....	9 75@ 10 00
Southern gray forge.....	9 50@ 9 75
Southern charcoal No. 1.....	14 00@ 14 50
Missouri charcoal No. 1.....	12 50@ 13 00
Ohio softeners.....	14 50@ 15 50
Lake Superior car-wheel.....	15 50@ 16 00
Southern car-wheel.....	16 75@ 17 00
Genuine Connellsville coke.....	4 50
West Virginia coke.....	4 50

ROGERS, BROWN & CO.

MR. H. B. PLANT will assist the State of Florida in making an exhibit of State products at the Atlanta Exposition.

THE Columbia (S. C.) Board of Trade has elected C. B. Simmons, president; T. S. Bryan, vice-president, and W. E. McNulty, secretary and treasurer. The new officers are young men, and are noted for their ability and energy.

MECHANICAL.

The Baltimore & Ohio Tunnel Motors.

The MANUFACTURERS' RECORD has received from the General Electric Co. an expert description of the electric locomotives to be used for hauling Baltimore & Ohio trains through the Belt Line tunnel at Baltimore. Some months ago a partial description of this apparatus was given, but

armatures to the wheels by means of an especially-designed flexible coupling. The method of spring suspension has been carefully modified to allow of the immediate adjustment of the wheels to the irregularities of the tracks, and thus effect a diminution in the wear, both to the motors and the track. The massive armatures are of the iron-clad type. A hollow shaft serves to carry the armature, and through this passes the wheel-axle to which it is con-

nects as heavy as those now handled by the heaviest steam locomotives. A test of one of the completed trucks as shown representing one-half of the locomotive was recently made upon the tracks at the Schenectady works of the construction company. In order to obtain the necessary load a New York Central heavy six-wheel engine was made use of and the electric locomotive truck coupled to it. The machines were then sent in opposite directions and tugged at the connecting coupling as in a tug-of-war. The electric locomotive had a slight advantage over the steam engine in weight on the driving-wheels, and pulled it up and down the track with apparent ease. For the same weight upon the drivers it was shown that the electric locomotive will start a greater load than the steam locomotive. The test also proved that not only were the motors sufficiently powerful, but that the driving mechanism and armature couplings are amply strong to transmit the torque of the armature to the axle.

A Great Corporation.

"A Roll of Honor" was lately published by the Boston Herald. It contained sketches of establishments of the Hub which have passed a half-century of business life. Conspicuous among these is the Boston Belting Co., which was founded in 1828 under the name of the Roxbury Rubber Co. Charles Goodyear became acquainted with John Haskins, the manager of the company, in 1842 in New York city. Mr. Haskins explained to Mr. Goodyear, who was then engaged in the manufacture of pocketbooks in Philadelphia, the difficulties under which his company was laboring on account of not being able to preserve the rubber goods for any great length of time after they were made. This interested Mr. Goodyear, and, giving up his business in Philadelphia, he went to Boston to see if he could not discover a process of curing rubber that would prevent it from stiffening with cold or softening and decomposing with heat. His experiments demonstrated that the use of artificial heat applied to rubber compounds containing sulphur would produce the desired results. Soon after he purchased from Daniel Hayward his patent for the use of sulphur in

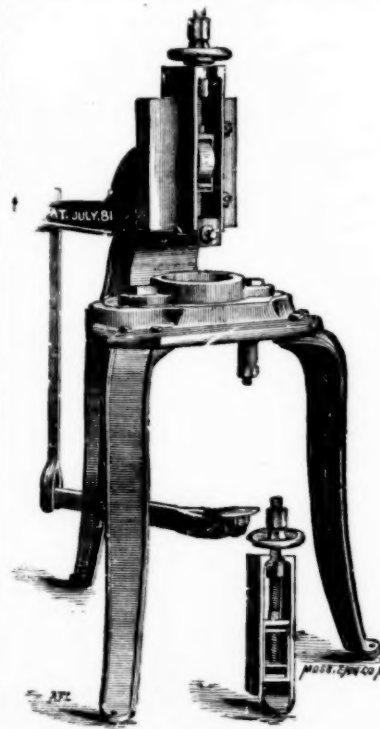
shoes, clothing, hard rubber goods, etc., were sold, and other companies were then formed for the manufacture of these articles. The Boston Belting Co. retained the exclusive right to manufacture all kinds of mechanical rubber goods, such as belting, hose, packing, springs, valves, printers' blankets, deckle straps, billiard cushions, tubing, etc. The capital of the company has been increased from time to time, until it now has a paid-up capital of \$1,000,000.

The principal store and office is at 256, 258 and 260 Devonshire street, Boston, with a branch store at 100 Chambers street, New York city. Agencies are located in all the great cities in the United States and Europe, also in Australia, Japan and other countries.

James Bennett Forsyth is the manufacturing agent and general manager. His inventions cover many of the most useful machines used in the manufacture of rubber goods, and many of its most useful and profitable articles of manufacture.

Improved Treadle Press.

Some desirable advantages have been embodied in a new treadle press built and being introduced by Stevenson & Co., 229 North Holliday street, Baltimore, Md., and illustrated herewith. This firm has achieved success in building machinery of this class, and its latest production has many noteworthy improvements. A commendable feature is the rapid and easy manner of adjusting, which will meet with the approval of those desiring a quick, easy and



IMPROVED TREADLE PRESS.

accurate working foot press. By referring to the cut it will appear that the adjustment is a simple and substantial arrangement by which the press can be set to any range of work by the operator while standing in front of the die. Another important feature is that no matter what adjustment is given to the plunger, the treadle remains the same; hence the stroke of the operator's foot is uniform at all times. The makers claim on this point a superiority for their machine.

No. 3 Band Saw.

Strength and heaviness of design and fine workmanship and materials in construction are the characteristics pointed out in the No. 3 band saw made by Cordesman, Meyer & Co., of Cincinnati, Ohio, and illustrated on next page. The journals are heavy and the bearings very long. The wheels are thirty-six inches in diameter, turned true, balanced and covered with rubber bands of good quality, securely ce-

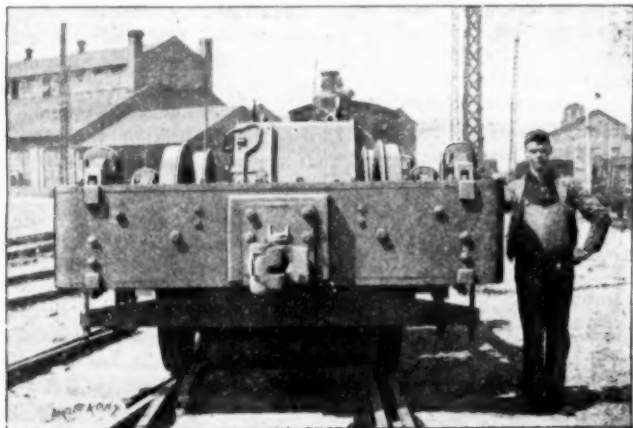


FIG. 1.

since then very important changes have been made in its construction.

This experiment will be the first practical step in this country toward the subjection of the steam trunk railroad to electricity. Two comparatively small locomotives, one of thirty tons and the other of forty tons on the drivers, are already running, but not upon any important lines, and while perfectly successful, their operation gives but little clue to the outcome of the practical tests on the Baltimore & Ohio.

The delay that has occurred in the completion of the work has been of advantage, in that it has allowed of the embodiment in this apparatus of all the recent improvements in electric railway practice.

The complete motors are the largest railway motors in the world, and while ponderous in appearance, are by no means so bulky as might be expected from the heavy duty they will be called upon to perform. They are so set on the truck that they will be easy of access under all circumstances,

connected by the universal coupling already mentioned, which allows of freedom of movement in any direction.

The cab, which will be spring-supported on the truck frame, will be of sheet iron and wood, and will have windows on all sides in order that the occupants may have an unobstructed view in all directions. Within the cab will be set up the series parallel controller, by means of which the movement of the locomotive will be under control of the engineer. The locomotive will be also equipped with bells, safety devices, etc., and will have a Janney automatic coupler at each end. From the illustration of one truck it will be seen that the finished locomotive will be an imposing piece of electrical machinery. It will weigh in its completed state ninety-five tons, will be fourteen feet three inches long, nine feet six and three-quarters inches wide, and will be of standard gage. The maximum speed will be fifty miles an hour. This will be reduced to thirty miles

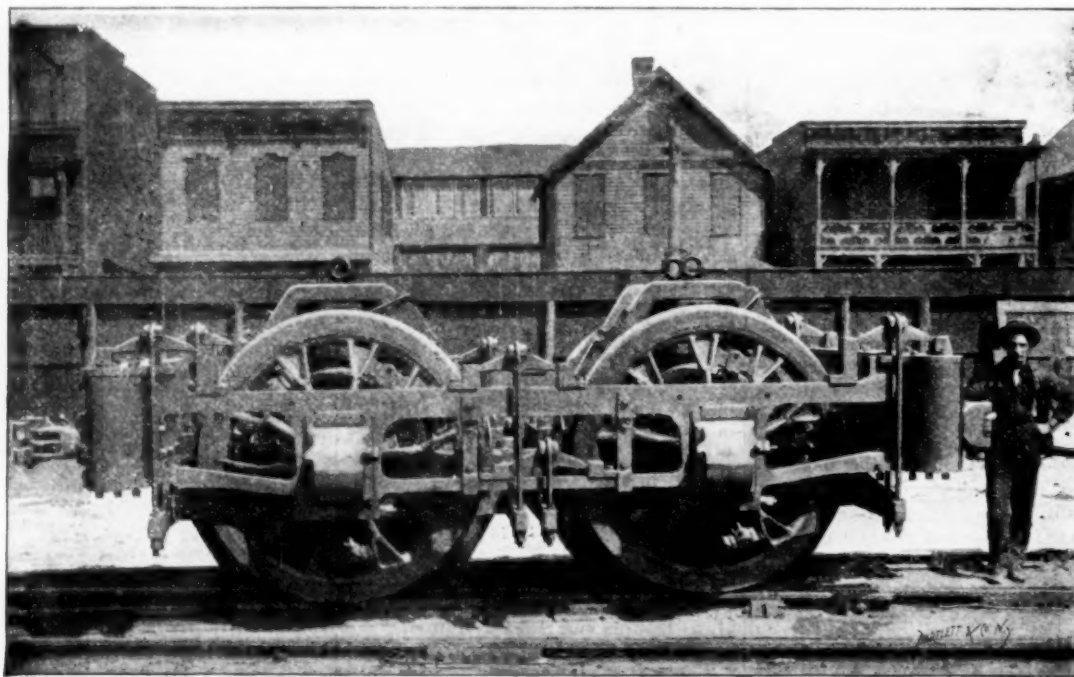


FIG. 2.

whether the locomotive is at a standstill or in motion.

The trucks are of forged iron, each resting upon four driving-wheels of cast steel sixty-two inches in diameter. Flexibly supported upon each of these trucks are two six-pole gearless motors, one for each axle, transmitting their motion from the

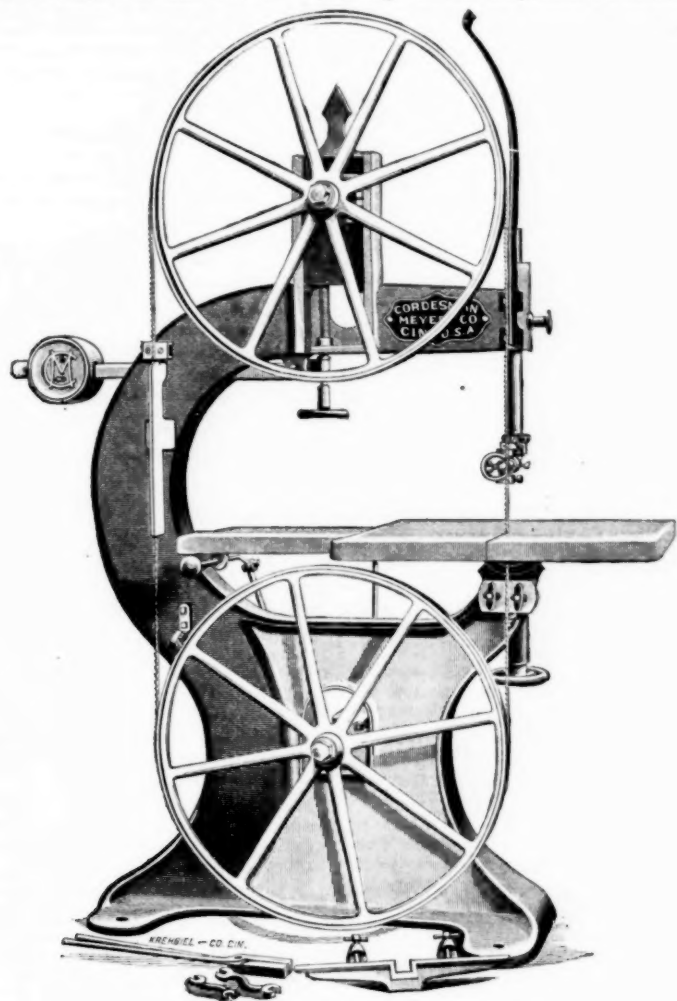
an hour when only half the draw-bar pull is exerted, and to fifteen miles an hour with full draw-bar pull. The average speed of the loaded train will be about thirty miles an hour. It can, of course, be run either forward or backward.

This locomotive is designed for heavy work, and will be called upon to handle

rubber goods, and then applied for a patent for the use of sulphur and artificial heat in rubber compounds, which was allowed June 15, 1844. The name of the Roxbury Rubber Co. was afterwards changed to the Goodyear Manufacturing Co., and in 1845 to the Boston Belting Co. In 1846 rights to manufacture rubber boots,

mented and ground true. The upper wheel has a tilting device for shifting the blade on its face to the desired path. It is operated by a hand-screw placed on the back of machine, so that it can be reached without stopping the saw. The upper wheel has a vertical movement of nine inches. The

lating the tension of the saw is adjustable and effective. There is a belt-shifter convenient to the hand of the operator, and a brush on lower wheel to keep it clean of sawdust. With the machine one French blade ready for use, brazing frame and tongs and necessary wrenches are furnished.



NO. 3 BAND SAW.

length of the saw is eighteen feet eight inches. The saw, in its path upward, is in line with the rear of the opening above table, so that pieces thirty-six inches from saw to edge can be swung.

The table can be tilted to any angle up to forty-five degrees, and is clamped in position by the hand-wheel beneath table. An

The loose and tight pulleys are $14 \times 4\frac{1}{2}$ and should make about 425 revolutions per minute.

A New Baling Press.

An entirely new device in baling presses is illustrated herewith. Probably its great capacity has given it the name of the

ready at all times and will take all it can get. The manufacturer states that while in solid or single-plunger presses the operator has to be ready to the second with his charge, and if he misses it he has to wait for the next, with this press, after throwing the hay with a fork on the two long jaws of the "Hungry Elephant," it is driven forward by the feeders of one jaw or plunger while the other is receding for another charge. Thus the hay is continuously driven forward in successive charges, putting the hay down in hard-pressed, smooth bales of thin layers, easily separated when opened and free from dust. For simplicity, durability and ease of operation it is claimed that it has no equal, and sells at a lower price than other presses to do the same work. The illustration herewith represents the press for belt-power. It is also made with horse-power and adapted to any and all kinds of work for which a press of its class may be used. Its simplicity, as shown in the illustration, is considered its strongest recommendation. The continuous feed makes, it is said, the hardest and heaviest bale with a given power that it is possible to make, time required to do the packing being considered. The capacity is limited only by the amount the operators are prepared to handle. The size is 16×18 , variable lengths, and the sole manufacturer is the DeLoach Mill Manufacturing Co., Atlanta, Ga.

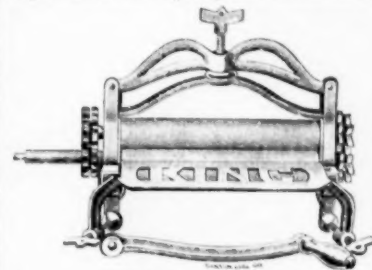
The King Wringer.

A clothes wringer is a necessity to every household, and the dealers find a regular sale for this article. Improvements in such devices will, therefore, interest a wide class, and we illustrate herewith a wringer offered to the trade by the National Wringer Co., of Canton, Ohio, which is said to be the largest manufacturer of iron-frame wringers in the world. Special attention is given to important parts in making these wringers.

For the rolls the rubber is first rolled out into long, thin sheets; the shafts are specially prepared; all grease and scale is removed; they then receive a coat of copper. The rubber sheets are then wound around the shaft until the desired thickness is obtained. They are then placed in a mold and are vulcanized. No twine or wire is used. All rolls are solid white rubber through to the shaft.

The frame of a wringer is next in impor-

wringer, which is one of a variety of styles of iron and wooden-frame wringers made by this company. The "King" is designed to meet a demand for a wringer with gears. The frame is malleable iron galvanized to prevent rust. Springs are made of fine



THE KING WRINGER.

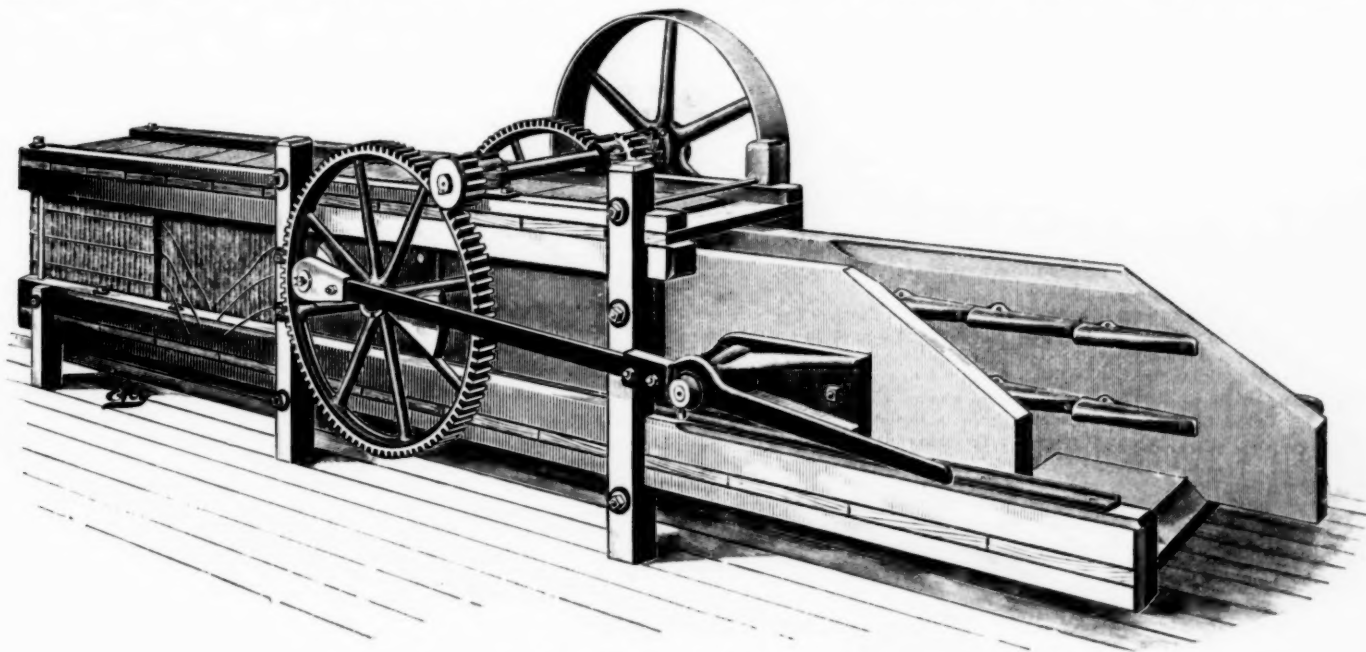
steel tempered in oil and tested to a pressure of 1200 pounds. The clamp swings from side to side, and will fit any size or shape of tub. Pressure is graduated by a single top screw, and a sliding shield that folds up compactly is a feature.

Success of a New Electric Railway System.

The E. M. railway system, invented by James F. McLaughlin, of Philadelphia, has, through its general manager, George Lodge, made a contract with Messrs. Thomas C. Lozier and Henry Pringle, of Belleville, Canada, for the control of the Dominion territory on royalty for constructing street railroads under the E. M. patents. We are advised that these gentlemen have arranged to build an aggregate of 140 miles of road at once. Patents have been issued on the E. M. system for Great Britain, Belgium, Austria, Italy and Germany. Negotiations, it is announced, are being carried on with the Manhattan Elevated Railroad of New York city for equipping its Eighth avenue line with this system, and other parties in New York, Jersey City and Chicago are also manifesting considerable interest.

The E. M. system was exhibited at the Street Railroad Convention in Atlanta in October, and attracted considerable attention. It is operated by means of an underground conduit, and by an ingenious arrangement of wires and specially-patented controller the current is taken from the underground wires without any opening whatever in the conduit.

Negotiations have been made by parties



THE "HUNGRY ELEPHANT" BALING PRESS.

iron table is usually furnished with this machine, but a wood table is supplied if desired. The roller-guide above the table is of late and improved design and construction, and is highly praised by all users.

The guide can be raised for cutting different thicknesses up to fifteen inches. The lever and weight attachment for regu-

"Hungry Elephant," and it is considered a distinct departure in the baling-press line.

It is a patent two-part hollow plunger that will bale anything that can be put into a bundle. It is said to be the only press made with a continuous feed, and this is its distinctive feature. No time is lost by missing a charge, for the continuous feed is

tance, and on all parts of the frame wherever the most strain is concentrated it is specially strengthened. In all wringers manufactured by this company the pressure on the rolls is adjusted from the centre, and an equal pressure is thus assured on all parts of the rolls.

The cut shows the "King" style of

in Great Britain, France and Austria to control the patents for this system in these countries, and a large construction company, we are informed, has been organized. Other negotiations pending in the United States promise interesting results. A recent public test of the system was made in Philadelphia with results that were deemed satisfactory.

CONSTRUCTION DEPARTMENT.

WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

*Means machinery is wanted, particulars of which will be found under the head of "Machinery Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

THE Boot Cotton Mills, of Lowell, Mass., has petitioned the Massachusetts legislature for authority to manufacture cotton goods outside of that State, as it is the company's intention to operate a plant in the South.

THE Merrimack Manufacturing Co., of Lowell, Mass., has petitioned the State of Massachusetts to authorize the company to increase its capital stock from \$2,500,000 to \$3,500,000 and manufacture goods outside of the State. The Merrimack Company's intention is to manufacture in the South.

THE Jackson Company and the Nashua Manufacturing Co., both of Nashua, N. H., manufacturers of sheetings, shittings, etc., will petition the legislature for authority to build mills outside of the State, it being their intention to operate plants in the South. The Nashua Manufacturing Co. will increase its capital stock by \$1,000,000 and the Jackson Company by \$700,000.

ALABAMA.

Berry Station—Cannery.—A. O. Jackson will establish a cannery.*

Bessemer—Steel Plant.—The Bessemer Land & Improvement Co. is reported to have made a contract which will mean the removal of the Fort Payne (Ala.) steel plant to Bessemer.

Birmingham—Publishing.—The Birmingham Courier Co. is to be organized to publish a German newspaper; L. Braun, secretary.

Birmingham—Corn Mill.—Chas. F. Wheelock will put in a corn mill of 1800 bushels daily capacity to employ twenty-five men. Machinery has been ordered.

Birmingham—Steel Plant.—The directors of the Birmingham Rolling Mills have in contemplation the erection of a steel plant to cost \$300,000. Additions and improvements to the present plant will also be made in the near future at a cost of \$40,000.

Birmingham—Electric Plant.—It is reported that a \$200,000 electric-light plant will be built.

Florence—Pump Works.—The Florence Pump & Lumber Co. will quadruple its output for 1895.

Mobile—Paving.—Articles of incorporation of the Mobile Paving Co. have been filed by Adam Glass, A. H. Spira, A. S. Lyons, P. J. Lyons, Jas. K. Glenn, Rudolph Benz, of Mobile, and G. W. Taunton; capital \$5000.

Montgomery—Cotton Mill.—A movement for a 15,000 spindle cotton mill has been inaugurated.

Montgomery—Cotton Mill.—The Commercial and Industrial Association has a proposition for the erection of a \$300,000 cotton mill.

Townly—Cannery.—T. S. Hindon will establish a cannery.*

Troy—Electric light and Water Works.—The city will improve its electric-light and water works. Address the mayor.

Tuscumbia—Water Works.—The Tuscumbia Water Works have been sold under a mortgage to H. L. Armstrong, who bought for the benefit of the bondholders.

ARKANSAS.

Arkansas City—Mercantile.—The Doran Co. has been incorporated with a capital stock of \$10,000 by David A. Gates, Ed. Doran, G. R. Lacy, Mrs. William Ogburn and G. N. Adams. Ed. Doran is president; G. R. Lacy, secretary, and G. N. Adams, treasurer. The company will transact a general mercantile business.

Rives—Mercantile, etc.—The Rives Mercantile Co. has been incorporated by J. G. Taylor, E. C.

Howell, Benjamin Taylor and M. L. Altheimer with a capital stock of \$25,000. E. C. Howell is president; J. G. Taylor, E. C. Howell and M. L. Altheimer, directors. The company will conduct a general merchandise and planting business.

Jonesdale—Grist Mill.—S. A. Jones & Co. will rebuild their grist mill.*

Springdale—Water Works.—The construction of water works is talked of. Address the mayor.

FLORIDA.

Bartow—Phosphate Plant.—The Bone Hill Phosphate Co. is about to commence work on its new plant.

Florida—Lumber and Phosphate Plants.—W. W. Cummer and associates, of Cadillac, Mich., contemplate establishing lumber and phosphate plants in Florida.

Fort Myers—Water Works.—Henry L. Roan is constructing a system of water supply.

Jacksonville—Cannery.—The Tropical Canning Co. will establish a cannery. Address care of L. R. Benjamin.*

Orlando—Electric-light Plant.—A Mr. Robinson is endeavoring to secure franchise to erect an electric-light plant. Address care of Young Men's Business League.

Tampa—Publishing.—W. F. Stovall, P. O. Knight, Chas. C. Whitaker and J. S. McFall have incorporated the Tampa Tribune Publishing Co. with a capital stock of \$10,000.

GEORGIA.

Athens—Cotton Mill.—The erection of a cotton mill is being agitated.

Athens—Canning Factory.—W. A. Tabor, of Fort Lamar, will locate a canning factory in Athens.

Athens—Shoe Factory.—The Wilson Shoe Manufacturing Co. has been organized with a capital of \$16,000 for the purpose of establishing a shoe factory. The organizers are T. P. Vincent, J. J. McMahon, Max Joseph, J. M. Hodgson, D. M. Wilson and others.

Atlanta—Machine Shops.—The Southern Railway Co. will triple the size of the East Tennessee, Virginia & Georgia shops in Atlanta.

Canton—Handle Factory.—G. I. Bassett, of Ohio, will establish a handle factory.

Cartersville—Cannery.—C. McEwen and W. P. Laramore contemplate establishing a cannery.*

Cartersville—Light and Power.—The Cartersville Light & Power Co. has been incorporated with a capital stock of \$100,000, with \$25,800 paid in, by P. W. French, Weymouth, Mass.; F. P. Symonds, Salem, Mass.; W. E. Merrill, Haverhill, Mass.; F. M. Smith, Lynn, Mass., and J. H. Turnbull, Boston.

Cedartown—Acid Works.—M. T. Singleton, J. W. Singleton, Chas. H. Clark and Geo. H. Clark have incorporated the Inland Acid Co. to mine and manufacture pyrites, etc., manufacture acids, etc. The capital stock is placed at \$64,000.

Griffin—Creamery.—A movement is afoot for the establishment of a creamery. Address H. J. Wing.

Macon—Fertilizer Works.—A. M. Rodgers, W. H. Mansfield and others have chartered the American Fertilizer Co. to manufacture fertilizers, etc. The capital stock is \$10,000.

Mineola—Orchard Company.—Milton W. Strait, W. S. Sheppard, J. M. Loren, P. Ramlow and others have organized the Mineola Orchard Co. to cultivate fruits, etc. The capital stock is \$40,000.

Newnan—Electric light Plant.—The city has opened negotiations for the purchase of the Newnan Light & Power Co.'s electric-light plant; the latter is valued at \$17,000. Address the mayor.

Polk County—Iron-ore Mining.—The North Georgia Mining Co., of Cedartown, Ga., has received contract at \$12,000 to erect washers and construct water line on the Oredell iron-ore property in Polk county.

Rome—Creamery.—There is talk of organizing a company to build creamery. Address J. W. Hancock.

Tifton—Marble Works.—Marble works have been established.

Vineville—Sewers.—The citizens contemplate constructing sewers.

KENTUCKY.

Covington—Dyeing Plant.—Putnam, Hooker & Co., of Cincinnati, Ohio, will erect in Covington a large plant for dyeing cotton goods.

Louisville—Printing Works.—S. W. Colston, W. L. Drake and Geo. W. Smith have incorporated the Justice Printing Co. with a capital of \$5000 to conduct a printing and publishing business.

Louisville—Factory.—Henry Diel has prepared plans for a factory and store to cost \$25,000, to have hydraulic passenger elevator, etc.

Louisville—Iron Works.—The Sneed & Co. Iron

Works will be at once repaired, after damage by fire; now in operation.

Winchester—Mercantile.—C. W. Miliken is organizing a \$50,000 stock company for mercantile purposes.

LOUISIANA.

Abbeville—Iron Bridge.—The city council contemplates constructing an iron bridge across Vermillion river. Address Gus Godchaux, chairman.

Algiers—Iron Works.—Alfred Tufts will rebuild his burned iron works; forty to fifty hands will be employed.

Crowley—Rice Cultivation.—J. M. Parker intends to engage in rice farming.

New Orleans—Coal-handling Plant.—B. D. Wood & Son are erecting a complete plant for coal handling.

MARYLAND.

Baltimore—Electric-power Plant.—The Edmondson Avenue, Catonsville & Ellicott City Railway Co. will erect a large electric-power plant.

Baltimore—Publishing.—The Deutsch Publishing Co. has been incorporated by Theodore F. Lang, Wm. Deutsch, Ferdinand Deutsch, Frank Nolen and Nathan M. Alcock; capital stock \$2500.

Baltimore—Electric-power Plant.—The Mt. Washington Electric Light & Power Co. has purchased site for its proposed electric-power plant.

Baltimore—Lime Works.—The C. H. Pearson Packing Co. contemplates erecting lime works.*

Charlotte Hall—Saw Mill.—J. B. Mattingly will erect a saw mill to cut the timber on lands near Charlotte Hall.

Pocomoke City—Water Works.—W. J. Young, of Easton, Pa., noted last week as having franchise for water works, will organize the Pocomoke Water Co. to construct same.*

Princess Anne—Water Supply.—The citizens are discussing a plan for providing a better water supply. Address Thos. H. Bock.

Washington, D. C.—Ice Factory.—The Washington Ice Manufacturing Co. has been chartered with a capital stock of \$30,000. G. H. Moore is president.

Washington, D. C.—Brick Machine Works.—A charter has been granted to the United States Combination Reppress & Fancy Brick Co., which proposes to make and sell patent brick machines. It has a capital stock of \$1,000,000.

MISSISSIPPI.

Canton—Water Works.—The city will construct a system of water works. Address the mayor.*

Dublin—Saw Mills.—The Southern Equipment Co., of Memphis, Tenn., has made arrangements to locate saw mills on the Dublin & Cold Water Railroad.

Dublin—Lumber Plant.—The Lewiston Land & Manufacturing Co. will erect a heading and stave factory near Dublin.

Hattiesburg—Timber, etc.—Turner & Co. have incorporated to buy and sell timber, rosin, turpentine. John Turner, Wm. E. Griffin, Geo. M. Kennedy and others are incorporators; capital stock \$100,000.

Lumberton—Telephone Line.—A company has been organized to construct a telephone line to McComb city.

Moss Point—Lumber Mill.—Lake Mills, to manufacture and sell lumber, has been incorporated by J. Bounds, W. C. Veach; capital stock \$20,000.

Purvis—Telegraph Line.—A company with \$1000 capital has been organized to construct a telephone line to Columbia.

MISSOURI.

Clayton—Electric Plant.—The County Electric Light & Power Co., capital stock \$5000, has been incorporated by M. B. Greensfelder, E. W. Warfield, E. H. Benoist, C. K. Ramsay and others.

Clayton—Telephone Line.—The St. Louis County Telephone Co., capital stock \$5000, has been incorporated by M. B. Greensfelder, E. W. Warfield, O. H. Benoist and others.

Dearborn—Water Works.—The construction of a system of water works is talked of. Address the town clerk.

Festus—Glass Works.—The Festus Glass Bottle Factory, with a capital stock of \$30,000, has been organized with F. W. Brickey, president; W. R. Donnel, treasurer, and James E. Cover, secretary. The following directors were elected: John Kitson, George Bollinger, John Nychols, F. W. Brickey, W. R. Donnel, S. T. Waggener, John O. Akerson, J. E. Cover and Fred Schaefer. A site has been selected, and the factory will be erected immediately.

Greenfield—Water Works.—It is reported that wells will be sunk for a water supply. Address the town clerk.

Kansas City—Cooperage Plant.—The Western Cooperage Co. has been incorporated by C. W. Decker, Newport, Ark.; C. W. Goetz, St. Louis; W. B. Hill, O. J. Hill, J. A. Sargent, Kansas City, and J. H. Borton, Springfield; capital stock \$10,000.

Lewiston—Electric light Plant.—The city is putting in an electric-light plant. Address the mayor.

St. Louis—Factory.—Geo. D. Barnard & Co. will erect a factory to be two stories high, have architectural ironwork, freight elevator, steam heating, etc., to cost \$35,000.

St. Louis—Laundry.—The Lac'ede Laundry Co. has been incorporated with a full-paid capital of \$5000 by Henry W., Mary A. and John H. Freudenstein.

St. Louis—M. R. Collins, Jr., & Co. have incorporated with a capital stock of \$200,000.

St. Louis—Building.—The Stewart-Coir Building Co. has been incorporated, capital stock \$50,000, by Griffith Coir, J. C. Stewart, Louis Malgairett and W. A. Calhoun.

St. Louis—Carriages.—The Timken Carriage Co. has been incorporated with a capital stock of \$50,000 by Cord Ringer, H. H. Timken and Henry Timken.

St. Louis—Mercantile.—The Henry Funk & Son Co. has been incorporated with an all paid capital of \$2500 to carry on a general merchant tailoring business by William W. Cowan, Henry and Henry A. Funk.

St. Louis—Construction Company.—The Batdorf Construction Co., capital \$2000, has been incorporated by Harry Batdorf, Helen E. Batdorf, Julia E. Rood, Joseph S. Rood and Thomas C. Vance.

St. Louis—Grain Elevator.—A movement is afoot for the erection of a 1,000,000 bushel grain elevator, and it is stated that plans have been completed.

St. Louis—Investment Company.—The Concordia Investment Co., capital \$5000, has been incorporated by G. F. Perfeld, W. F. Parker and A. D. Barlow.

St. Louis—Machine Company.—The Landis Wax Thread Sewing Machine Co., capital \$5,000, has been incorporated by J. C. Moon, J. B. Dohy, R. S. Fleming, C. R. Crawford and C. H. Brown.

St. Louis—Plumbing.—The Broadway Plumbing Co. has been incorporated with an all paid capital stock of \$1000.

NORTH CAROLINA.

Ashboro—Gold Mine.—L. M. Russell, of Eldorado, is opening a gold mine near Ashboro.

Burlington—Bleachery, etc.—There is talk of a finishing mill and bleachery being established.

Charlotte—Flour Mill.—Gresham & Austin contemplate putting in a roller flour mill.

Charlotte—Cotton-machinery Works.—James Leslie, of Montreal, Canada, now in Charlotte, is said to be seeking a location for the establishment of a plant for manufacturing card clothing, belting and reeds.

New Bern—Lumber Plant.—The Stimson Lumber Co. is making considerable improvements to its plant, putting in new machinery, etc.

Newton—Manganese Mine.—L. A. Carpenter is opening a manganese mine.

Shelby—Machine Works.—H. G. Hall, of Blacksburg, is removing to Shelby his plant for making band machines for cotton mills.

Statesville—Cotton Mill.—The Statesville Cotton Mill has decided to at once put in the 6000 spindles for which its plant is now ready; T. D. Miller, secretary.

Waynesville—Water Works.—The city will petition the legislature for authority to issue \$15,000 in bonds for water works.

Wilmington—Saw Mill.—H. G. Wadley, of Wytheville, Va., will operate a saw mill at Wilmington.

Wilmington—Broom and Veneer Factory.—A company is organizing to establish a broom and veneer factory.

Wilmington—Bridge.—R. S. Montford, chairman committee of public roads, will receive bids until January 19 for the building of a bridge over Purvine's creek and the construction of a dam in New Hanover county.

SOUTH CAROLINA.

Blacksburg—Gold Mine.—Ira Hardin will open a gold mine and erect stamp mill.

Chapin—Tobacco Factory.—A company will be formed with \$1000 capital to establish a tobacco factory.

Charleston—Lime Company.—The Southeastern Lime & Cement Co., with a capital stock of \$8000, has been incorporated. The directors are Howard Fleming, D. Van Smith and Hugh Sinkler; president, Howard Fleming; secretary and treasurer, D. Van Smith.

Columbia—Grist and Meal Mill.—R. G. Johnson, manager; Jno. H. Sims and J. F. Sims, secretary

and treasurer, have incorporated the Palmetto Milling & Commission Co. with a capital stock of \$6000. The company will install a meal and grist mill of 600 bushels daily.

Columbia-Cotton Mill.—The Congaree Cotton Mill, which has been closed two years, will be put in operation, it is stated, by Pennsylvania capitalists.

Darlington-Tobacco Factory.—Ira S. and H. A. Burch will establish a tobacco factory.

Greenville-Broom Factory.—A. R. Morgan and R. L. Crookshank have established a broom factory.

Montmorenci-Water Works.—The Shacco Game Club contemplates constructing a system of water works.

Oakway-Mercantile.—The Oakway Grange Store has been incorporated with a capital stock of \$5000 by L. A. Edwards, James Bearden, J. V. B. Harly and Jas. W. Bearden.

Rock Hill-Tobacco Factory.—A company has been organized with a capital stock of \$20,000 to establish a tobacco factory. J. B. Johnson, T. A. Crawford, Fred Mobley, J. H. Miller and others are interested.

Walhalla-Cotton Mill.—J. D. Verner has been elected president of the Walhalla Cotton Mills, recently chartered, and D. P. Robins, secretary. Over \$50,000 of the capital stock is subscribed, and it is reasonably sure that the mill will be built.

TENNESSEE.

Chattanooga-Hat Factory.—A company has been organized and established a hat and cap factory at Fifth and Market streets.

Chattanooga-Steamboat Company.—A. H. Love, J. A. Lebow, Jno. W. Lee and others have chartered the Knoxville & Chattanooga Packet Co. to operate steamboat line.

Chattanooga-Paint Works.—The Chattanooga Paint Co. is now making extensive improvements to its plant.

Cleveland-Electric-light and Water Works.—The city contemplates holding an election on \$40,000 of bonds for water works and electric-light plant. Address the mayor.

Esco-Handle Factory.—The Standard Handle Co., of Knoxville, has built a branch factory at Esco.

Greenville-Creamery.—Milligan & Landstreet will probably add another separator to their creamery.

Hustburg-Manufacturing.—S. T. Peet and J. W. Newbern, of Salt Lake City, Utah, have located a colony at Hustburg, and will establish grist and saw mills, broom factory, lumber plants, brick works and other industries.

Jellico-Coal and Coke Mines.—The Indian Mountain Coal & Coke Co.'s property was sold last week to W. H. Fizer, of Knoxville, for \$7550. It remains for the courts to confirm the sale.

Kingston-Handle Factory.—Additional machinery will be put in the Kingston Handle Factory.

Knoxville-Mining, etc.—C. M. Woodbury and others have applied for incorporation of the Mingo Mountain Coal & Coke Co.

La Follette-Coal and Iron Mines, etc.—The La Follette Coal & Iron Co. is preparing to thoroughly develop its 25,000 acres of coal, iron and timber lands; office of company, 54 Wall street, New York.

Lenoir City-Electric-light Plant.—The Lenoir City Car Works has let contract for an electric-light plant.

Sherman Heights-Woodworking Factory.—The Sherman Heights curtain-pole factory is being enlarged by an additional building 80x100 feet; 100 more men will be employed.

TEXAS.

Austin-Compo-board Factory.—The Southern Compo-Board Co., with a capital stock of \$500,000, has been chartered by Chas. A. Smith, Chas. J. Johnson, Arthur R. Rogers, Octavius C. Drew and Monroe F. Ellis.

Brenham-Machine Shops.—Board of Trade will endeavor to secure the location of the repair shops of the Atchison, Topeka & Santa Fe Railroad.

Dallas-Electric-light Plant.—C. L. Warfield and associates are seeking franchise for an electric-light plant to cost from \$40,000 to \$60,000.

Dallas-Pipe and Pump Works.—The Commercial Club has in hand a proposition for a \$25,000 pipe and pump manufacturing plant.

Dallas-Manufacturing.—The Hub Manufacturing Trading Co., with a capital stock of \$30,000, has been incorporated by B. F. Powell, M. W. Mann and G. W. Cotter.

Fort Worth-Mercantile.—The Parker Lowe Dry Goods Co., capital stock \$6000, has been incorporated by Earle H. Lowe, Robert J. Parker, C. A. Bridgeman.

Fort Worth-Chartered.—J. B. Naylor & Co., \$10,000 capital; incorporators, J. B. and R. H. Naylor and O. T. Moreland.

Fort Worth-Oatmeal Mill.—W. B. McDowell, Box 192, contemplates putting in an oatmeal mill.

Fort Worth-Cotton Mill.—A company is being organized to erect a \$200,000 cotton mill. Address the Texas Land & Colonization Co.

Galveston-Bridge.—The La Porte, Houston & Northern Railroad intends to construct a bridge across Galveston bay.

Lockhart-Water Works.—The city or a private company will build water-works plant. J. M. Storey, mayor, can be addressed.

Paris-Compress.—The Clarksville Compress Co., capital \$50,000, has been incorporated by John Martin, P. J. Pierce, Frank Fitzhugh, Wm. T. Whitman and John W. O'Neil.

Terrell-Grain Elevator.—The Terrell Milling Co. is preparing to erect a \$10,000 grain elevator.

Terrell-Cottonseed-oil Mill.—The Terrell Cotton Oil, Manufacturing & Refining Co. will enlarge and repair its plant and put in considerable new machinery.

Waco-Mantels, etc.—The Texas Mantel & Screen Co., capital \$3,000, has been incorporated by John P. Massey, W. R. Burgess, E. P. Massey, J. B. Seegar, W. A. Holt, Dan Wise and others.

Weimar-Water Works.—The city contemplates constructing water works. Address the mayor.

VIRGINIA.

Alexandria-Increase Capital.—The Frown Automatic Car Coupling Co. will increase its capital stock to \$500,000.

Culpeper-Gold Mine.—Operations will be resumed at the Powhatan gold mine and a thorough development of the property will follow. A Reese is to be superintendent.

Gayton-Coke Ovens.—The Virginia Coal & Coke Co. is constructing three coke ovens.

Norfolk County-Bridge.—The Norfolk & Carolina Railroad Co. will construct a bridge across Scott's creek; W. G. Elliott, president, Wilmington, N. C.

Petersburg-Telephone System.—For information concerning the proposed telephone system address W. M. Habliston.

Petersburg-Reservoir, etc.—An extra appropriation of \$12,000 has been granted to lay water pipes on Halifax street. The water works committee will condemn one and a-half acres of land for a reservoir. Address Mr. Patterson, chairman water works committee.

Portsmouth.—L. J. Boole will erect a boiler, and C. W. Walker will erect a boiler for laundry purposes.

Portsmouth-Manufacturing, etc.—The Prentiss Land Co., W. G. Parker, president, has purchased Whitehead's farm of sixty acres, near the city, and will lay it off into building lots. Factories will be located also.

Richmond-Woodenware Factory.—The Richmond Butter Tray Co. has been organized to manufacture butter trays, etc., with a capital stock of \$10,000; H. L. Urban, president; B. A. Grasberger, secretary, and L. L. King, treasurer.

Suffolk-Saw Mill.—W. H. Gay will erect a steam wood mill; machinery purchased.

WEST VIRGINIA.

Charleston-Flour Mill.—W. F. & T. P. Lippett have recently put in burr-milling machinery.

Huntington-Timber Company.—The Huntington Timber Co., to buy and sell timber, has been incorporated by J. L. Caldwell, N. Smith, Charles Nash, Huntington; Merritt Magann and M. B. Cable, Cattleburg, Ky.; maximum capital stock \$50,000.

Indian Mills-Flour Mill.—Barber, Witt & Co. will put in a roller process flour mill.

Morgantown-Oil Lands.—O. Guthrie is in Morgantown representing Chicago parties who intend to develop oil lands.

Winifred Junction-Gas Retort.—The Elerslie Gas & Coke Co. is building a new retort; building is 66x84 feet; contracts all let.

BURNED

Decatur, Texas.—The county courthouse; loss \$43,000.

Hamlin, W. Va.—The Hamlin saw mill.

Huntsville, Ala.—The Huntsville Female College; loss \$45,000.

Joplin, Mo.—The Joplin Gas Works partially destroyed.

Louisville, Ky.—Snead & Co.'s Iron Works damaged to the extent of \$40,000.

Mayfield, Ky.—The Mayfield Steam Laundry; loss \$2000.

Plaquemine, La.—Henry Wilbert's pop factory; loss \$5000.

Richmond, Va.—Mr. Stacy's shuck factory.

St. Joseph, Mo.—The Wyeth Hardware & Manufacturing Co.'s plant.

Valley Mills, Texas.—Mr. Kellum's cotton gin.

Van Horn, Texas.—The Texas & Pacific Railroad Co.'s pumping machinery and building; loss about \$10,000.

Whitney, Texas.—P. M. Greenwade's cotton gin.

BUILDING NOTES.

Atlanta, Ga.—The Southern Railway Co. will erect a building for the exposition.

Baltimore, Md.—Dwellings.—Chas. E. Spalding will erect a number of two and three-story dwellings.

Baltimore, Md.—Depot.—Plans have been prepared for a two story brick depot for the Western Maryland Railroad Co. to cost \$25,000.

Baltimore, Md.—School.—George Worthington has prepared plans for a \$25,000 school building to be built by the city.

Baltimore, Md.—Dwellings.—Jacob S. Rosenthal will erect fifteen dwellings.

Charlotte, N. C.—Residence.—John W. Hunt will build a \$10,000 residence.

Columbus, Ga.—Temple.—The Masons contemplate the erection of a temple. Address the secretary.

Crossville, Tenn.—Office Building.—Niedererhouse Bros. will erect an office building.

Eastman, Ga.—School.—The city intends building a new schoolhouse. Address the mayor.

Gainesville, Texas.—Opera-house.—A plan is under way for the erection of an opera house.

Galveston, Texas.—Telephone Building.—The Southwestern Telephone Co. contemplates erecting a building.

Greenville, Texas.—Opera-house.—T. H. King will rebuild the King Opera-House, which will be equipped with all the modern conveniences of a theatre, with steam or hot-air heating; plans not yet selected; size seventy-four feet front by 108 feet deep; cost from \$35,000 to \$40,000.

Harrison, Miss.—Depot.—The State railroad commission has ordered the erection of a depot by the Louisville, New Orleans & Texas Railroad Co.

Huntsville, Ala.—W. I. Wellman will erect several cottages.

Kansas City, Mo.—Office Building.—F. G. Altman will erect a three-story brick business and office building to cost \$25,000.

Kittrell, N. C.—Hotel.—The Davis Hotel will be rebuilt. Address W. F. Davis.

Louisville, Ky.—Residence.—F. W. Mo'bray will remodel store and residence at a cost of \$4000. Henry Diel has prepared plans for a \$12,000 store and dwelling.

Louisville, Ky.—Store, etc.—D. X. Murphy & Bro. have prepared plans for remodeling store and dwelling; the Fidelity Trust Co. will remodel a storehouse, to have hydraulic passenger elevator, steam heating, etc.; Deppens & Sons will remodel hotel into a business building, to have hydraulic passenger elevator, steam heating, etc.

Louisville, Ky.—Robinson, Norton & Co. are contemplating erecting a 10-story building.

Lynchburg, Va.—Church.—Extensive improvements will be made to the First Baptist Church. F. D. Johnson is on the committee.

Natchez, Miss.—Depot.—The State railroad commission has ordered the erection of a depot by the Louisville, New Orleans & Texas Railroad Co.

New Berne, N. C.—Courthouse, etc.—Sealed proposals will be opened February 14 for the erection of a United States courthouse, etc., by Chas. E. Kemper, acting supervising architect, Washington, D. C. (See advertisement in MANUFACTURERS' RECORD of January 18.)

New Orleans, La.—The Southern Pacific Railroad Co. will build a cotton platform 500 feet long by sixteen feet wide.

Palmyra, Mo.—City Hall.—The city will hold an election on January 29 to decide as to issuing \$8000 in bonds for a city hall. Address the mayor.

Parkersburg, W. Va.—Hotel, etc.—C. B. Tavenner and others will build an auditorium and hotel on the site of Fort Doremans.

Rosetta, Miss.—Depot.—The State railroad commission has ordered the erection of a depot by the Louisville, New Orleans & Texas Railroad Co.

St. Louis, Mo.—Bank Building.—The S. Cupples Real Estate Co. will erect a bank building to cost \$18,000.

St. Louis, Mo.—Residence.—Love & Sons will build a \$10,000 residence.

St. Louis, Mo.—Warehouse.—The Cupples Real Estate Co. will erect a warehouse to cost \$150,000.

St. Louis, Mo.—Dwelling.—Adam Boeck & Co. will erect a dwelling. G. W. Davis has purchased site for \$7500, and will erect a flat building.

St. Louis, Mo.—Residences, etc.—Ira J. Hedrick will build ten residences to cost \$40,000; James Hedrick, a block of eighteen flats to cost \$12,000; Wm. C. Rosenbaum, a residence to cost \$3000; Garden City Realty Co., three residences to cost \$36,000, will have steam heating, etc.; F. Daily will erect a \$15,000 residence; A. Henman, store and flat building to cost \$5000; T. G. Cahill, residence to cost \$5000.

Towson, Md.—Office Building.—Augustus A. Piper will erect an office building 45x75 feet.

Washington, D. C.—Residence.—Henry W. Closson will erect a stone and brick residence, 30x80 feet, to be heated by steam.

Zebulon, Ga.—Courthouse.—The county commissioners contemplate building a courthouse.

RAILROAD CONSTRUCTION.

Railroads.

Arabi, La.—A company has been formed to build a railroad in the upper part of St. Bernard parish. Henry T. Beauregard is president of the company. His address is Arabi, La.

Austin, Texas.—Surveys are being completed for the road to be built by the Vining Coal Co., of Austin. It is to be called the Vining & Coleman City.

Bartow, Fla.—The railway from Bartow to Winton is to be connected with the Plant system by a spur about 1000 feet long. This will be built by the Plant people.

Blountsville, Ala.—A meeting of residents along the route has been called to consider the construction of the proposed line from Guntersville, on the Tennessee river, to Bangor, forty miles.

Dahlonega, Ga.—The projected railroad between Lula and Dahlonega, thirty miles, through the mining district, has been revived by a survey being made for the line. George J. Baldwin, of Savannah, and G. W. Scott, of Atlanta, are said to be interested. Dahlonega parties including W. P. Price, are interested in the enterprise, and propose building eight miles of the road.

Dallas, Texas.—The Dallas & Pacific Railroad, which was partially graded in a northwestern direction, will, it is said, be revived, and the line built from Dallas to Grapevine. It is claimed that an Eastern syndicate organized by Governor Hogg, of Texas, is backing the movement.

Dallas, Texas.—Surveys are about to be made for the terminal railway of which W. C. Connor is president. It is expected that construction work will begin in about thirty days.

Dublin, Miss.—Contract has been awarded to the Southern Equipment Co., of Memphis, Tenn., to furnish a 35-ton locomotive, rails and other equipment for six miles of railroad to be built at once by the Dublin & Coldwater Railroad Co., of which J. J. Wickham is president. An extension of fifteen miles is to be built in the near future.

Ellaville, Fla.—The Ellaville, Westlake & Jennings is completed for eleven miles from Ellaville to Westlake. Grading has been let for the last section of nine miles. G. J. Sweet is engineer, and J. W. West, president.

Fort White, Fla.—The E. B. Bailey Railroad, running south from Fort White, has been purchased by the Pittston Hard Rock Phosphate Co. The new owner will extend the line to some point on the Sevanee river.

Fredericksburg, Va.—The project to build a railroad from Fredericksburg to tidewater on Chesapeake bay down the northern neck of Virginia has resulted in forming a company. W. C. Hight, of Bridgeport, Conn., is president, and F. L. Rodgers, of the same place, secretary. W. A. Little, of Fredericksburg, and George B. Jones, of Richmond, are directors. It is stated that surveys will be made at once, and that the parties named represent ample capital to build the line. The line is to extend from Fredericksburg to Millenbeck, a distance of about nine miles; will be standard gage, 76-pound steel rails, white oak and heart cypress ties and masonry for double track. Wm. A. Hankins, of Richmond, Va., is engineer in charge.

Galveston, Texas.—A bill has been introduced in Congress by Representative Fynn, of Oklahoma, authorizing the Galveston & G. Co. to build a railway through the Indian Territory. The road proposed is to enter the Territory somewhere along the south line of the county of Harper, and thence through the Territory to a point at or near Denison thence to the city of Galveston.

Galveston, Texas.—E. E. Carpenter, of the Gulf & Interstate road, states that a surveying will begin on the seventy miles of grading this month, and that the company is now ready to purchase material. He claims that London people will take \$700,000 in bonds as soon as they can be engaged.

Kingwood, W. Va.—Supt. J. A. Martin, of the Tunnelton Kingwood & Fairchance, writes the MANUFACTURERS' RECORD confirming the report that the road will be changed to standard gage and extended to a connection with some larger system.

Luraville, Fla.—The Live Oak, Luraville & Deadman's Bay Railroad Co. has completed its line from Live Oak to Luraville. A two mile extension from Luraville to the Suwannee river is to be built, and bids for this work are invited. Address James R. White, secretary, Citra, Fla. The Live Oak & Gulf Co., as soon as its organization is completed, will operate this road as an independent line.

New Orleans, La.—An ordinance has been passed in the streets and landings committee authorizing the Southern Chemical & Manufacturing Co. to build a railroad which would form part of a belt line system. Dr. W. H. Watkins is president of the company.

New Orleans, La.—About ten miles of new track will be laid in the terminal yards of the Southern Pacific Railroad.

Palestine, Texas.—W. B. Johnson, one of the

promoters of the proposed line from Palestine to the Sabine river, writes the MANUFACTURERS' RECORD that preliminary surveys have been completed, and that experts are examining the beds of iron ore and coal claimed to exist along the route.

Pickens, W. Va.—Pres. J. N. Camden, of the recently-incorporated Pickens road, writes the MANUFACTURERS' RECORD that it is projected between Pickens and Addison, W. Va., and will not be a part of another system.

Rayne, La.—President Hampden Story, of the Central Louisiana Railway Co., advises the MANUFACTURERS' RECORD that it has \$250,000 capital, and that the road will be seventy miles in total length, extending through Acadia, Vermillion and St. Landry parish, with terminals at Vermillion bay, Abbeville and Cheyenneville, on the Texas & Pacific system. Surveys are about to be made, and right of way is being secured. Work will begin on the section of line between Rayne and Church Point.

Roanoke, Va.—Vice-President King and Chief Engineer Manning, of the Baltimore & Ohio, have been again examining the route of the proposed extension into Roanoke. E. Dillon and William Anderson, of Lexington, are also interested.

San Marcos, Texas.—The Missouri, Kansas & Texas Railway Co. will, it is understood, commence construction in a few weeks on its 50 mile extension from San Marcos to San Antonio. J. W. Petheram, of Denison, Texas, is chief engineer.

Savannah, Ga.—The Savannah Railway & Terminal Co. is reported as about to begin work at once on its three miles of railroad, also wharves on the Savannah river. Pope Barrow is president.

South McAlester, I. T.—George L. Good & Co., contractors for the Choctaw, Oklahoma & Gulf line, advise the MANUFACTURERS' RECORD that they now have 2000 men and 800 teams at work on the extension from Wister Junction. Several contracts have been sublet.

Sumter, S. C.—Arrangements are being made to secure right of way for the extension of the Ohio River & Charleston road from Camden to Sumter, where it will connect with the Atlantic Coast Line. Samuel Hunt, at Cincinnati, is general manager.

Tuscaloosa, Ala.—Work has begun on the extension of the Tuscaloosa steam dummy line. John T. Cochrane is superintendent.

Electric Railways.

Annapolis, Md.—The city council has granted the Annapolis & Bay Ridge Company right to lay tracks on several of the city streets. This is a part of the system planned from Baltimore to Bay Ridge by way of Severn Park. Henry Y. Brady is engineer.

Carthage, Mo.—The Jasper County Electric Railroad Co. has decided to build its line as rapidly as possible. It is intended to have the road completed to either Cartersville or Webb City by June 1. F. H. Fitch is superintendent of the company.

Centerville, Md.—Engineers are making final surveys for the proposed Queen Anne's Railroad between Denton and Queenstown. J. W. Troxel is engineer, and W. H. Bosley, of Baltimore, president.

Charlottesville, Va.—The electric street railway has been completed and is in operation. T. O. Troy is manager.

Ocala, Fla.—H. L. Anderson, of Ocala, reports that the six-mile line, lately noted as to be built to Silver Springs, will be operated at first with dummies and afterwards equipped with electricity.

Rome, Ga.—An Eastern syndicate has purchased a large amount of the stock of the Rome Electric Street Railway, and J. B. Marvin has been made manager of the road. Some improvements are to be made, including additional cars.

Sedalia, Mo.—Regarding the proposed line between Sedalia and Brown Springs, Superintendent D. C. Metsker, of the Sedalia Railway & Power Co., informs the MANUFACTURERS' RECORD that it will be built in the spring by the Sedalia & Brown Springs Railway Co., which will issue \$50,000 in bonds, secured by a mortgage on the power plant and system of the Sedalia Company, which he claims is valued at \$400,000. The bonds are 6 per cent. The Brown Springs line is to be operated by the Sedalia Company.

Washington, D. C.—A bill has been introduced in the Senate incorporating the Washington & Maryland Electric Railway Co. J. Kesley Schoepf is interested.

Wilmington, N. C.—The extension of the electrical railroad of the Wilmington Street Railway Co. to Oakdale and Bellevue cemeteries is proposed. M. F. Heiskell is superintendent.

Street Railways.

Mississippi City, Miss.—George W. Pierce has received permission to build a road for horse cars in the city limits. It is to be built and to be in operation within ninety days from date.

Bridges.

Fredericksburg, Va.—The Northern Neck Railroad & Transportation Co. proposes building a steel bridge over the Rappahannock river at

Fredericksburg about 750 feet long, and may also construct several short plate girder bridges between Fredericksburg and Milenbeck. William A. Hankins, of Richmond, Va., is engineer in charge.

Galveston, Texas.—A bill has passed the House of Representatives of Congress authorizing the La Porte, Houston & Northern Railroad Co. to construct a bridge across Galveston bay. The office of the company is La Porte, Texas.

Little Rock, Ark.—A bill has passed the House of Representatives of Congress authorizing the Little Rock & Pacific Co. to build a bridge across the Fourche Lafeure and Petit Jean rivers in Arkansas. Gov. W. M. Fishback is president of the company.

MACHINERY WANTED.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

Boat Machinery.—See "gasoline engine."

Boiler.—E. Dillon & Co., Indian Rock, Va., are in the market for horizontal or upright boiler of fifteen to twenty horse power.

Boiler and Engine.—Daniel Duncan, Columbus, Miss., wants prices on eight and ten horse-power return-tubular boiler and engine.

Boiler and Engine.—See "oil-mill machinery."

Bridge Builders.—Chas. F. Pitts, Magnolia, Miss., wants to correspond with bridge builders.

Canning Machinery.—C. McEwen and W. P. Laramore, Cartersville, Ga., want canning machinery.

Canning Machinery.—A. O. Jackson, Berry Station, Ala., wants canning machinery.

Canning Machinery.—T. S. Hindon, Townly, Ala., will want canning machinery.

Canning Machinery.—The Tropical Canning Co., Jacksonville, Fla., will buy machinery for canner. Address care of L. R. Fenjamin.

Chair Machinery.—James Pearsall, Dunn, N. C., wants machinery for making medium-grade oak chairs with split bottom, and especially a machine to cut the splits.

Corn Mill.—H. P. Acher, Bluff City, Va., wants a corn mill.

Crane.—The Casey & Hedges Manufacturing Co., Chattanooga, Tenn., wants a 12-ton traveling crane.

Drying Machinery.—The Hitt Salvage Co., Augusta, Ga., wants to buy hot-air machinery (new or second-hand) for drying fibre or lumber.

Engine.—The Chattanooga Paint Co., Chattanooga, Tenn., is about to order a 125 horse power engine.

Electric-light Machinery.—The Lampasas Electric Light, Water & Power Co., P. O. Box 65, Lampasas, Texas, wants electric-light machinery, including lamps, storage battery, Nos. 8 and 11 wire, insulator, switches, etc.

Exhaust Fan.—F. M. Hester & Son, Williston, Fla., want prices on exhaust fan thirty to forty inches, and freight rate to Williston.

Flour Machinery.—J. M. Strickler, Tenth Legion, Va., wants machinery for flour mill of fifteen to twenty barrels capacity.

Flour Mill.—Ault & Gentry, Mossy Creek, Tenn., want complete outfit for 40-barrel roller flour mill.

Flour-mill Machinery.—W. B. McDowell, Box 192, Fort Worth, Texas, wants information regarding machinery for manufacturing crushed or rolled oats.

Flour-mill Machinery.—N. I. Gorsuch & Son, Westminster, Md., want cleaner for wheat.

Gasoline Engine and Propeller.—E. E. Erricon, Claremont, Va., wants a gasoline engine and 18 or 20 inch propeller for 50-foot boat; good second-hand preferred.

Grist Mill.—S. A. Jones & Co., Jonesdale, Ark., will want outfit for grist mill, including two sets of burrs, bolting cloth and smutter, with belts, pulleys, cup and line shafts; burrs about forty-two to forty-eight inches.

Lathe.—The Aurora Foundry and Machine Shops, Aurora, Mo., needs another lathe, about 28-inch swing (second-hand will do).

Hoop Machinery.—J. L. Girton, Winchester, Tenn., wants to buy second-hand hoop machinery.

Husk Machine.—H. P. Acher, Bluff City, Va., wants a husk machine.

Iron Works.—The Casey & Hedges Manufacturing Co., Chattanooga, Tenn., wants architectural iron work for roof 60x400 feet.

Iron or Steel Work.—There is talk of replacing the burned grand-stand at the Baltimore baseball grounds with an iron or steel structure. Address Edw. Hanlon, manager, Baltimore, Md.

Lime Works.—The C. H. Pearson Packing Co., Box 73, Baltimore, Md., wants estimates on the erection of a plant for handling 3000 bushels of oyster shells daily in the crushing department and 2000 bushels of lime daily in the bolting department, slake and bolt it, and shute it to the baggers.

Locomotive.—The Pittston Hard Rock Phosphate Co., Pittston, Fla., wants a locomotive.

Locomotive and Cars.—Robert McLean, South Gay street, Baltimore, Md., wants a narrow-gauge, second-hand Shay geared locomotive, thirteen tons or under; also three to six logging cars for wood rail; must be in good condition.

Oil-mill Machinery.—The Terrell Cotton Oil Manufacturing & Refining Co., Terrell, Texas, will be in the market for cottonseed-oil mill machinery, including boilers, presses, filter press, engine, shafting, belting, conveyors, pump, etc.

Pipe.—The Curtis Bay Light & Water Co., East Lexington street, Baltimore, Md., has decided to seek bids for laying a line of water pipe a distance of several miles.

Pulleys, etc.—J. L. Girton, Winchester, Tenn., wants to buy pulleys and shafting.

Pump.—See "oil mill machinery."

Quarrying Machinery.—W. J. Prentice and associates, of 1009 Liberty street, Pittsburg, Pa., will buy complete equipment of quarrying machinery.

Rails.—Allen Bros. & Wadley, Limited, Allentown, La., are in the market for one to two miles of 35 pound steel rails, new or good relaying.

Rails.—The Georgia-Florida Round Timber Co., Valdosta, Ga., wants 40-pound steel rails.

Rails, etc.—The Pittston Hard Rock Phosphate Co., Pittston, Fla., wants rails.

Riveter.—The Casey & Hedges Manufacturing Co., Chattanooga, Tenn., wants a riveter.

Roofing.—Ault & Gentry, Mossy Creek, Tenn., will want roofing.

Roofing.—W. C. Stallings, Martin, N. C., wants slate roofing.

Roofing.—F. M. Hester & Son, Williston, Fla., wants prices on corrugated-iron roofing, and freight rate to Williston.

Roofing.—M. W. Sims, Bryan, Texas, will want iron roofing and siding.

Scales.—Wanted at 404 Exchange Place, Baltimore, Md., platform scales, weigh 1000 pounds.

Shears and Shaper.—John M. Kramer & Bro., Maria Stein, Ohio, want a shear to cut one-eighth to three eighths steel sheets, flanging blocks for one quarter inch steel; also want shaper (new or second-hand).

Tanning-extract Outfit.—"Tanner," care MANUFACTURERS' RECORD, Baltimore, Md., wants information about vacuum pans for making tanning extract and concentrating same.

Tinners' Tools.—F. Rockhill, 1323 West Fayette street, Baltimore, Md., wants a set of tinners' tools, second-hand.

Turpentine Still.—A. J. Keeton, Toomsaba, Miss., is in the market for a 16 barrel turpentine still.

Water Works.—Sealed bids for constructing water works at Canton, Miss., will be opened on February 6; H. W. Latimer, city clerk.

Water Works.—Complete equipment for water works will be wanted for Pocomoke City, Md., including pump of 800 gallons capacity, either steam or to be connected with a gasoline engine; standpipe 100 feet high, twelve feet in diameter; 500 feet of eight inch pipe, 3000 feet six inch pipe, one mile of four-inch pipe. Address W. J. Young, Easton, Pa.

Water Works.—Sealed bids will be opened January 21 for constructing water works at Carrollton, Ky. Address O. M. Wood, mayor.

Water Works.—Wanted, estimate on cost of water works, including 500,000-gallon pumping engine, 7000 feet of pipe, 100 foot steel standpipe, twelve feet in diameter; hydrants, boilers, etc. Address E. M. Storey, Lockhart, Texas.

Wire.—O. H. Suck, St. Mary's, W. Va., wants to buy copper S. S. wire, No. 12, in lots of from 500 to 1000 pounds; quote prices delivered.

Woodworking Machinery.—J. L. Girton, Chattanooga, Tenn., wants to buy planer, matcher and resaw, second-hand.

TRADE NOTES.

THE M. A. Furbush & Son Machine Co., of Philadelphia, Pa., has just completed for Messrs. Howland Croft, Sons & Co., of Camden, N. J., three 60 inch worsted cards.

MR. WILLIAM A. GREGG, secretary and treasurer of the Peck & Gregg Hardware Co., Atlanta, Ga., died on the 8th inst. Mr. Gregg was an important factor in the development of this company, being with it since its organization. The

company's business will be continued without any change.

THE Berlin Iron Bridge Co., of East Berlin, Conn., is putting up a new retort for the Elerslie Gas & Coke Co. at Winifred Junction, W. Va. The building is sixty six feet wide and eighty-four feet long, with an iron roof covered with slate.

THE annual meeting of the stockholders of the Van Wagoner & Williams Hardware Co. will be held at the office of Collins & Corbin, 243 Washington street, Jersey City, N. J., on January 24. Seven directors to serve for the ensuing year are to be elected.

A WELL-LOCATED manufacturing plant at Atlanta, Ga., is offered for sale in our advertising columns. It is considered especially suitable for a cotton or woolen mill. The property consists of three acres of land with railroad facilities and a new well-lighted four-story brick building 44x146 feet with several wings.

THE Lodge & Davis Machine Tool Co., of Cincinnati, Ohio, has received a large order from the Forges du Douai, of the Ville de Douai, Department Du Nord, France. The Forges du Douai is one of the largest concerns in France. They made a large display at the World's Fair, and the order to the Lodge & Davis Machine Tool Co. is the outcome of a visit of the proprietors to this country during the fair.

MESSRS. CLARSON & SLAYSMAN, engineers and machinists and canmakers' outfitters, have outgrown the capacity of their shops on Water street, and have removed their works to the large commodious building situated on South Front, near Baltimore street. They have thoroughly remodeled this building to suit the requirements of their constantly-increasing business, and are consequently in a better position to handle either light or heavy work expeditiously.

FLORIDA cypress has achieved a high reputation by reason of its lasting qualities. Used in the manufacture of wooden tanks it gives both durability and security. A firm which has built up an extensive business in the manufacture of such tanks is G. M. Davis & Son, Palatka, Fla. Having the raw material right at hand, and with long experience and study of requirements, this firm is turning out tanks of remarkable excellence and strength. All material is carefully selected, and attention given to the making of perfect and close-fitting joints and the proper placing, right size and strength of hoops. The firm's factory is supplied with the latest improvements in machinery, and with a force of skilled mechanics and a fine stock of materials it is prepared to promptly fill orders for cypress tanks of all sizes from 100 to 75,000 gallons capacity.

THE Cotright Metal Roofing Co. calls attention to the system of roofing which it manufactures, embracing metal slates, Victoria shingles, trimmings or ridges, hips, valleys, etc. This company states that these goods are manufactured of full-weight tinplate, no light-weight plates or wasters being handled, galvanized steel or copper. Its goods are recommended where a fire proof, storm-proof, ornamental and durable finish is required. The company claims that with the present low price of tin it is in a position to sell its product at prices within the reach of everyone, and requests persons using or handling roofing to write for quotations and samples, which are supplied without cost. The main office of the company is located at Broad and Hamilton streets, Philadelphia, and its Western office at 134 Van Buren street, Chicago, Ill.

ONE of the solid and leading manufacturing concerns of the South receives extended importance by a change in its organization which took place January 1. The Southern Saw Manufacturing Co., Atlanta, Ga., changed its title to the Southern Saw Works, organizing under a State charter with a net cash capital of \$30,000, and authority to increase same to \$500,000. The principal owner of the stock and manager of the concern is Isaac S. Boyd, well known throughout the South as the president of several leading manufacturing and mining companies, to all of which he has brought phenomenal success. Under his management the Southern Saw Works is promised a wider and more important career. All the essentials for realizing such prosperity have been provided. The works are well equipped with a full line of machinery, and a corps of experienced and skilled mechanics has been thoroughly organized. The broadening out of this establishment furnishes another indication of the financial strength and growth of the South and the progressiveness of Atlanta business men.

THE Laughlin & Junction Steel Co., Mingo Junction, Ohio, has been succeeded by the Junction Iron Co., which has changed its name to the Junction Iron & Steel Co. With largely increased capital stock the company will continue the manufacture of the products of the former companies, and at present has capacity for the production of Bessemer, foundry and forge pig iron, soft Bessemer steel in ingots, blooms, billets and slabs, soft

steel nail plate suitable for shallow stamping in such lines as shovels, seats for agricultural implements, spiders, skillets and many other purposes. Additional facilities are being provided and contracts have been placed for machinery. After February 25 the company will be prepared to supply soft steel tin plate and sheet bars "boshed" and cut to any desired length, and rolled to any thickness from half inch up, also small steel billets from one and one-fourth inch, square or round, up to three inches. These billets will be of the grade of goods known as raw materials for manufacture of street and railway cars, agricultural implements, bolts, wagon and carriage axles, etc.

LATE orders of August Wolf & Co., Chambersburg, Pa., included a contract for building a 150 barrel roller-system flour mill for the Fairview Milling Co., Columbia, Pa., secured after the strongest competition experienced within a year by this concern. Among other contracts were: Barton Huffman, Ringoes, N. J., a 9x18 two-pair high Columbian roller-feed mill, together with power-transmitting machinery, through M. N. Hartz, general Atlantic agent; T. M. Biddle, of Altoona, Pa., 20 to 30 bushel cornmeal plant, and O. W. O. Hardman, Middlebourne, W. Va., 50 to 60-barrel roller mill, power for same to be furnished by a 60-inch standard "Wolf-Keiser" turbine water wheel, through Jas. J. Pollard, general central agent; contract for building Jno. H. Rutherford, Kingston, N. J., a 50 to 60-barrel roller-flouring mill, through M. N. Hartz, general Atlantic agent; G. F. McLaughlin, a 30 to 40-barrel "Wolf system" flouring mill, and D. E. Hendricks, of Field, S. C., a 40-barrel flouring mill, through General Southeastern Agent John T. Pensinger; Johnson & Lewis Supply Co., of Kansas City, Mo., order for one 7x14 two-pair high Columbian roller-feed mill, from the Kansas City branch office of Wolf & Co.

AN industrial plant that was planned and constructed with wise forethought is the new works of the Moore Manufacturing & Foundry Co. at Milwaukee, Wis. The arrangement of buildings is such as to permit the best efficiency and economy in the process of manufacturing the various hardware products of the company. Each structure is commodious and well built, and are a sufficient distance apart to secure protection against fire. There is a machine shop, two stories, 60x200 feet, with a one-story wing 60x90 feet; a brick boiler-house 22x40 feet, one-story pickle shed 16x16 feet, one-story foundry 120x200 feet, one-story brick pattern vault 18x50 feet, 12,000 gallon tank, sand-shed 20x65 feet, oil-shed 16x16 feet, rail building and japan-room 50x95 feet. The plant is thoroughly equipped with the Grinnell automatic sprinklers. A railroad switch enters the property, giving ample shipping facilities. Two hundred men are now employed in the shops, which have a capacity for 300 operatives. The company is a strong corporation, and handles an extensive patronage. It manufactures chiefly floor registers, barn-door hangers and differential blocks for hoisting heavy machinery and makes Gray's iron castings to order.

THE style of the firm of Stoddard, Lovering & Co., of Boston, Mass., has been changed, and it is now Stoddard, Haserick, Richards & Co. This concern was established in Boston in 1826 by Chas. Stoddard. It imports textile machinery and English, colonial and carpet wools, Egyptian cotton, cotton worsted and mohair yarns. This concern is said to be the largest importers of textile machinery of every description in this country, and is sole agent for the following leading English and French manufacturers: Dobson & Barlow, Bolton, England, cotton machinery of every description; special makers of "Simplex" cards, Heilmann combers and self-acting mules; Prince, Smith & Son, of Keithley, gill boxes, drawing, spinning and twisting frames for worsted spinning; Taylor, Wordsworth & Co., Leeds, wool washers, cards, back washers and Noble combs; Houghton, Knowles & Co., of Gomersal, woolen machinery, carding engines and mules; J. & T. Boyd, of Glasgow, twistors, spoolers, redoublers, etc.; John Crossley & Co., of Halifax, Brussels, Wilton and tapestry carpet looms; G. Hattersley & Sons, of Keithley, plain and fancy worsted looms; Samuel Law & Sons, Cleckheaton, cotton, woolen and worsted card clothing; Elkannah Hoyle & Sons, Limited, of Halifax, worsted, dyeing and finishing machinery; Societe Alsacienne de Constructions Mecaniques, of Mulhouse all kinds of worsted machinery on the French system.

ITEMS of importance in figuring on an engine for power purposes, after determining its capability for the work to be done, are the first and operating costs. The general usage which gas engines now find and their adaptability to many kinds of service demonstrates their capabilities. The first cost is said to be about the same as a steam plant, and it is the economy in operation to which the builder of the gas engine calls special attention. This economy depends largely upon the cost of coal and wood in different localities, which varies all the way from \$2.00 to \$15.00 per ton. It is argued that with a steam plant the engineer is compelled to carry a full head of steam at all times to be ready, should

work be required of the engine, and, consequently, on intermittent work, the boiler is continually blowing off steam, which is a waste that cannot be helped. The gas-engine makers also declare that another source of expense and inconvenience is the fires, which at night have to be banked or new fires built in the morning. On the other hand, it is pointed out that a gas engine is always ready for work at a moment's notice, can be started and stopped immediately, run intermittently for half an hour at a time or steadily for ten hours, if desired, at no expense when not working. The White & Middleton Gas Engine Co., of Baltimore, Md., calls attention to these points, and invites comparisons and investigation of its gas engines.

TRADE LITERATURE.

A FINE type of a modern woodworking machine is the illustrative feature of a calendar issued by the S. A. Woods Machine Co., Boston, Mass., builder of such machinery.

MANY handsome styles of baby carriages are shown in a catalogue sent out by the Simmons Hardware Co., of St. Louis, Mo. A richness and originality of design is shown that is highly creditable. Improved refrigerators, ice-cream freezers, boys' wagons, velocipedes, etc., are also illustrated in the catalogue.

A TEXT-BOOK of the laws and principles which control the ventilating currents in mines, together with problems for practice, tables upon the splitting of air, horse-power and yield of fans, effect of change of temperature, barometric height or humidity upon the yield of a fan, etc., will shortly be issued by J. T. Beard, Ottumwa, Iowa.

"ALL HONOR TO THE IRONWORKER," the celebrated painting illustrative of an ancient legend is reproduced in a faithful engraving on a calendar sent out by G. W. Schultz & Co., Philadelphia, Pa. It gives a reminder throughout the year of the importance to mankind of the iron industry, and makes a tasteful and ornamental calendar.

UNDER the title of "Facts Worth Knowing" some useful information is given in a pamphlet issued by the Foster Engineering Co., of Newark, N. J., about pressure regulators that will interest steam users. The purpose of the book is to indicate some of the weak points in the construction and operation of such devices, and to show how they may be and have been overcome.

A SMALL folder from Theodore Hiertz & Son, of St. Louis, Mo., describes Nonpareil anti friction metal. Concerns using this metal have given it some severe tests in comparison with other similar products, and the results have been highly creditable to Nonpareil metal. Its success on machinery of extraordinary speed has attracted considerable attention and stimulated a heavy demand.

A LION in repose is the engraving on a calendar from the Lawrence Cement Co., 1 Broadway, New York city, manufacturer of "Hoffman" Rosedale cement. The selection of the king of beasts for the central figure was a happy thought, as it typifies the strength of this company's product, and makes an effective as well as an attractive pictorial headpiece of a neat and well printed calendar.

CIRCULARS sent out by the G. H. Bushnell Press Co., Thompsonville, Conn., gives views of a five-roll stack with 48 and 60 inch crushing rolls, an improved solid box for oil presses fitted with the Tiffany patent oil-plate and made from one homogeneous steel casting. A five-box press for seed oils, with open hearth, steel cylinder and solid steel boxes fitted with Tiffany plates, is also shown.

A NEW catalogue, No. 5, has been issued by the Stow Manufacturing Co., of Binghamton, N. Y. This company makes the flexible shaft, one of the most unique and serviceable adjuncts ever added to the equipment of a factory. This shaft was invented by N. Stow, the president of this concern. It has been on the market for nearly a quarter of a century, and each succeeding year has extended its usefulness. Primarily designed by its inventor as a dental appliance, its application has steadily widened for mechanical purposes, until it has taken a place as a standard tool in the largest ship-yards, railroad, engine, boiler and general machine shops, both in this country and Europe. It is a time and labor-saver whenever, on account of weight or position, it is desirable to take the tool to the work, instead of the work to the tool, and with it many combinations are practicable. This new catalogue contains much new and instructive information regarding the flexible shaft and its uses. Many novel appliances are shown for use with the flexible shaft, including a tool for marble and stone-polishers. The Stow Manufacturing Co. has recently added a foundry department to its plant, and reports that during the past few months its business has shown a steady, healthy growth, with a very satisfactory outlook for 1895.

Promise of Two Steel Plants for Alabama.

Negotiations are pending for building two steel plants in Alabama. The Birmingham Rolling Mill Co., of Birmingham, Ala., will probably increase its capital stock from \$500,000 to \$850,000 and make extensive improvements, including the building of a basic open-hearth steel plant, provided certain promises and pledges made by the citizens of Birmingham are carried out. The Bessemer Land & Improvement Co., Bessemer, Ala., may also shortly build the steel plant previously mentioned in the MANUFACTURERS' RECORD.

Pittsburg People Buying Marble Land.

Messrs. George W. Hackett, W. O. Kirkland and W. J. Prentice, of Pittsburg, Pa., have purchased a tract of marble land in Blount county, Tenn., which contains several varieties of Tennessee marble, but principally what is known as the gray Knox. They have not yet decided whether they will form a company or operate the quarries themselves, but in any event it is their intention to open the quarries as soon as the weather moderates and put in all the necessary machinery for operating first-class marble quarries, such as channelers, steam drills, boilers, hoisting engines, derricks, etc.

Southern Telegraph Service.

The Postal Telegraph Co. is keeping pace with the development of the South by extending its lines as rapidly as possible in that section. It is now making arrangements to run a line into Knoxville and East Tennessee, and J. W. Kates, superintendent of the Southern division, has charge of the matter. The enterprise of the Postal Company and its excellent service have gained it an extensive patronage where its offices have been established in Southern cities. The promptness and reliability of its service indicate that its executive officials are endeavoring to secure patronage by every legitimate means.

A Good Use for Oranges.

The recent cold wave, by which a portion of the Florida orange crop was frozen, has created an agitation in that State in favor of plants for making wine and vinegar out of the fruit when it becomes frost-bitten or the market price reaches too low a figure. It is well known that orange juice makes a fine quality of wine and vinegar, and if more of it was made it would have a tendency to maintain prices on the fruit sent to market, while a new and profitable industry would be established in the orange-growing sections.

Engines for a Warship.

The Richmond (Va.) Locomotive Works has shown that it can build as fine marine engines as locomotives for railway service. The Richmond people secured the contract for furnishing the engines for the battleship Texas, now being completed at the Portsmouth navy-yard. The engines are to develop \$600 horse power, but it is expected that at the sea trial they will show 9000. The machinery is now complete, and the Richmond company has received its last payment from the government of \$53,000.

Gold-Mining.

J. D. Caldon, of Atlanta, has been visiting the McDuffie county (Ga.) gold fields and writes the MANUFACTURERS' RECORD as follows: "The Belknap-Smith mine has two shafts, one at 150 and one at 110 feet, in which eighteen men are at work on 400 feet of levels. Although about \$15 per ton in gold is lost on the plates, as an analysis of the 'tailings' reveals, the owner is still making \$3000 to \$4000 per month. The ore is very fractious, however."

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The Development of the South

is being rapidly pushed by the series of excursions offered by the Queen & Crescent Route from Cincinnati, running each month, to principal Southern points. The low rate of one fare for the round trip is offered on these occasions, selling tickets January 8, February 5, March 5, April 2, April 30. Twenty days are allowed in which to return. Stop-overs permitted at any point. These excursions afford an excellent opportunity to go and see for yourself what the South offers to the Northern man. The Queen & Crescent has over 1,000,000 acres of farm and timber land for sale; \$3.00 to \$5.00 per acre on easy terms. It will pay you to investigate. Address Chas. W. Zell, D. P. A., Cincinnati, Ohio; W. A. Beckler, N. P. A., 111 Adams street, Chicago, Ill.; C. A. Baird, T. P. A., Detroit, Mich.; W. W. Dunnavant, T. P. A., Cleveland, Ohio; W. W. Jones, immigration agent, Port Huron, Mich.; F. V. Anderson, land commissioner, Birmingham, Ala.

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	American Promoting & Trust Co.	39	Cleveland Twist Drill Co.	2	Gunning & Stewart Co.	18			Smith-Courtney Co.	42
	American Screw Co.	42	C. M. & St. Paul Railroad	37					Smith, S. Morgan	9
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TREASURY DEPARTMENT, Office Supervising Architect, Washington, D. C., January 14, 1895.—Sealed proposals will be received at this office until 2 o'clock P. M. on the 6th day of February, 1895, and opened immediately thereafter, for all the labor and materials and fixing in place complete the low pressure, return circulation, steam heating and ventilating apparatus required for the U. S. Custom-House and Postoffice building at St. Albans, Vermont, in accordance with the drawings and specification, copies of which may be had at this office or the office of the Superintendent at St. Albans, Vermont. Each bid must be accompanied by a certified check for a sum not less than 2 per cent. of the amount of the proposal. The right is reserved to reject any or all bids and to waive any defect or informality in any bid if it be deemed in the interest of the Government to do so. All proposals received after the time stated will be returned to the bidders. Proposals must be enclosed in envelopes, sealed and marked, "Proposal for Heating and Ventilating Apparatus, etc., for the U. S. Custom-House and Postoffice building at St. Albans, Vermont," and addressed to CHAS. E. KEMPER, Acting Supervising Architect.

TREASURY DEPARTMENT, Office Supervising Architect, Washington, D. C., January 14, 1895.—Sealed Proposals will be received at this office until 2 o'clock P. M. on the 14th day of February, 1895, and opened immediately thereafter, for all the labor and materials required for the excavation, concrete foundations stone and brick work, iron and wood floor, ceiling and roof construction, roof covering, drainage, etc., for the U. S. Postoffice, Courthouse and Custom-House building at New Berne, N. C., in accordance with the drawings and specification, copies of which may be had at this office or the office of the Superintendent at New Berne, N. C. Each bid must be accompanied by a certified check for a sum not less than 2 per cent. of the amount of the proposal. The right is reserved to reject any or all bids or to waive any defect or informality in any bid if it be deemed in the interest of the Government to do so. All bids received after the time stated will be returned to the bidders. Proposals must be enclosed in envelopes, sealed and marked, "Proposals for the Excavation, Concrete Foundations, Stone and Brick Work, Iron and Wood Floor, Ceiling and Roof Construction, Roof Covering, Drainage, etc., for the U. S. Postoffice, Courthouse and Custom-House building at New Berne, N. C.," and addressed to CHARLES E. KEMPER, Acting Supervising Architect.

TREASURY DEPARTMENT, Office Supervising Architect, Washington, D. C., January 7th, 1895.—Sealed Proposals will be received at this office until 2 o'clock P. M. on the 31st day of January, 1895, and opened immediately thereafter, for all the labor and materials required to put in place complete the steel and iron work above the 6th floor, embracing the 7th, 8th and 9th floors and main roof, and skylight over cornice and the 7th, 8th, 9th, 10th, 11th, 12th, 13th and 14th floors and roof of tower and the columns for supporting said floors and roofs, and beams and columns for stairways, etc., for the U. S. Postoffice building at Washington, D. C., in accordance with the drawings and specification, copies of which may be had at this office or the office of the Superintendent at Washington, D. C. Each bid must be accompanied by a certified check for a sum not less than 2 per cent. of the amount of the proposal. The right is reserved to reject any and all bids and to waive any defect or informality in any bid, should it be deemed in the interest of the Government to do so. All bids received after the time stated will be returned to the bidders. Proposals must be enclosed in envelopes, sealed and marked, "Proposal for the Steel and Iron Construction for the U. S. Post-

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